Diabetik Foot Care India™

Mfr. Diabetic Neuropathy & Foot Care Products

"All Product Catalogue"

We Care for
FOOT CARE

Committed to Excellence

23 Years of Service

CE

ISO13485:2003

Introduction

It is well-known that Diabetes has become a dangerous disease today. International Diabetes Federation (IDF) and World Health Organization (WHO) have estimated, by 2030, 438 million people will suffer due to diabetes worldwide and costs the world US$376 billion. Today, it is not restricted to elderly age-group and increasing number of young adults are also developing the disease.

Our venture in this domain is to spread awareness regarding the disease and help the physicians to screen the patients world-over in fighting Diabetes.

The Chief promoter, Mr. Elango Devy has more than 28 years of working knowledge in medical electronics and started his entrepreneurship in 1990. During the year 2002, moved into the diabetes domain and incorporated the Diabetik Foot Care India in April 2005. We are considered the market leader in providing the complete solution for the management of diabetic foot complications.

Customer Focus

Our customers are our most valuable source of information about the "real world" of medical practice. Members of our R & D, marketing and support teams meet with customers on a regular basis to discuss product improvements, new product ideas, and emerging clinical trends.

It is through these close working relationships that ideas emerge which can shape future developments and improve current practices.

Quality Policy

It is the policy of DFCI to provide quality products and services that consistently meet the needs and expectations of our customers and the regulatory requirements of our industry. Our objective is to be the quality leader in our markets as viewed by our customers. We implement our quality policy uniformly throughout the company through the development, execution, maintenance and continuous improvement of the quality functional guidelines and operating procedures, which have been prepared for every major functional organization within the company. To meet the export market demand, we have acquired ISO13485:2003 and CE Mark for few products.

Export:

Our products are exported to doctors, Clinics and Hospitals in Australia, Bangladesh, Bolivia, Bulgaria, China, Cyprus, Denmark, Egypt, Haiti, Indonesia, Israel, Kenya, Kuwait, Macedonia, Malaysia, Mangolia, Mauritius, Myanmar, Nigeria, Oman, Pakistan, Palestine, Philippines, Saudi Arabia, Singapore, South Africa, Sri Lanka, Taiwan, Tanzania, Thailand, UAE and USA (32 countries).

Import:

We are representing the following companies in India on exclusive marketing rights for selling their products in India.

Summit Doppler System Inc, USA – Hand Held Doppler for Vascular application.
Novel Gmbh, Germany – emed & Pedar range of pedography
Perimed Instruments, Sweden – Laser Doppler with tcpO2

We are a leading distributor in India and looking for similar innovative products for the Indian Market.

Infrastructure:

We have developed state-of-the-art infrastructure that is built on the most sophisticated designing and manufacturing capabilities. Our production facility is installed with advanced software and machines. The unit is managed by our team of production experts, who along with qualified team of quality control professionals, ensures that all the manufacturing processes are carried out as per the stipulated guidelines in order to maintain high and consistent quality standards across our product range.

We are a -

- ISO13485:2003 Certified
- CE Mark Certified
- Experienced R & D Department
- Good Financial Position
- Most advanced infrastructure
- Team of highly skilled, professional, and experienced technocrats
- Large Production Capacity
- Customer Friendly
- Best After Sale Service
- Installation & Training
- Quality-oriented products
- Guaranteed customer-satisfaction
- Prompt and timely deliveries
- Cost-efficient prices
- Experience in serving Indian as well as international customers
- Comprehensive after sales support
- OEM service offered
- Customized packaging available

DR V SESHIAH
DIABETES RESEARCH INSTITUTE

DR V BALAJI
DIABETES CARE CENTRE

October 16, 2012

To Whom it may concern:

This is to certify that the equipments indicated below are supplied by **M/s. Diabetik Foot Care India, Chennai** are performing to our satisfaction. Their after sale service is satisfactory and the products are performing to our satisfaction.

They are regularly visiting our centre and undertake training of our staff for the effective use of the equipments.

Sl.No	Description Of Equipment	Quantity	Supply Date
1	Digital Biothesiometer - Vibrometer	1 No	30/07/2005
2	Vascular Doppler Versalab 2000 for ABI / TBI	1 No	30/04/2003
3	Neuropathy Analyser - Vibrotherm Dx	1 No	31/01/2009
4	Vascular Doppler Versalab LE for ABI / TBI	1 No	04/09/2009
5	Colour Planter Pressure System	1 No	30/07/2005

The overall performance of the machines are good. We are happy to recommend their products.

Regards

Dr. Madhuri Balaji.

Dr. Madhuri S. Balaji

M. V. HOSPITAL FOR DIABETES®
&
Prof. M. VISWANATHAN DIABETES RESEARCH CENTRE®

(Established in 1972 by Prof. M. Viswanathan)

Head : Dr. Vijay Viswanathan M.D., Ph.D., FRCP (London) FRCP (Glasgow)

TO WHOMSOEVER IT MAY CONCERN

This is to certify that M/s. Diabetik Foot Care India, 18/1, Kannappa Nagar 3rd Main Road, Thiruvanmiyur, Chennai 600 041 are our regular supplier for the products Vascular Doppler for ABI / TBI, Biothesiometer and Plantar Foot pressure system.

They have supplied their VERSALAB range of Doppler system for ABI, Vibrometer Biothesiometer for our Royapuram Main Center, Mylapore Chennai Center and Koramangala, Bangalore Center since 2005.

We are satisfied with their products performance and after sales service.

Dated : 15-10-2012

DR.VIJAY VISWANATHAN

STORES DEPT.

4, WEST MADA CHURCH STREET, ROYAPURAM, CHENNAI-600 013. INDIA
☎ 2595 4913, 2595 0711 • Fax : 91-44-2595 4919
E-mail : appointments@mvdiabetes.com / drvijay@mvdiabetes.com
Web Site : www.mvdiabetes.com, www.whoccdindia.com

Aruna Diabetes Centre
COMPUTERISED LAB AND ECG ATTACHED
56, Thiruvenkatapuram, Choolaimedu, Chennai-94.
(Near Nungambakkam Railwaystation) Ph: 2374 42 52, 2374 59 69

Dr.A.PanneerSelvam, M.D.,(Gen.Med) D.Diab.,
Consultant Diabetologist

Consultation Time
Morning : 9.00 a.m. to 1.00 p.m Mon to Sat.
Evening : 5.00 p.m. to 9.00 p.m. Mon to Fri.

October 16, 2012

To Whom it may concern:

This is to certify that the equipments indicated below are supplied by **M/s. Diabetik Foot Care India, Chennai** are performing to our satisfaction. Their after sale service is satisfactory and the products are performing to our satisfaction.

They are regularly visiting our centre and undertake training of our staff for the effective use of the equipments.

Sl.No	Description Of Equipment	Quantity	Supply Date
1	Biothesiometer	1 No	01/02/2005
2	Vascular Doppler Versalab 2000 for ABI / TBI	1 No	01/02/2005
3	Neuropathy Analyser - Vibrotherm Dx	1 No	13/01/2012
4	Vascular Doppler Versalab LE for ABI / TBI	1 No	18/01/2012
5	Colour Planter Pressure System emed Pedography	2 Nos	27/11/2007

The overall performance of the machines are good. We are happy to recommend their products.

Regards,

Dr.A.Panneerselvam.,M.D.,D.DIAB.,

Ph : 2374 5969
Dr. A. PANNEERSELVAM, M.D., D.DIAB.
ARUNA DIABETES CENTRE, Chennai - 94

Trichy Diabetes Speciality Centre (P) Ltd.,

B-37, SASTHRI ROAD, VII CROSS EAST, THILLAI NAGAR, TRICHY - 620 018. SOUTH INDIA

ISO 9001:2000

Dr. V. Ravindranath.,
MBBS., MDC. (New Castle)., Gr.Dip.DIAB
Diabetologist
Managing Director

Ph : +91-431-2742091 (4 Lines)
Ph : +91-431-2740782 (Personal)
Fax : +91-431-2742092
Web : www.tdsc.in
E-mail : info@tdsc.in / vrn@tdsc.in

Date 29.12.10

TO WHOMSOEVER IT MAY CONCERN

This is to declare that the equipments Vascular Doppler Model VersaLab – Dx, Unit.Sl.No: D30505085 and Neuropathy Analyser Model VIBROTHERM – Dx, Unit.Sl.No: V20505046 Purchased from M/s. DIABETIK FOOT CARE INDIA, Plot No:38, 2/494, AGS Colony, 3rd Main Road, Kottiwakkam, Chennai – 600 041., Vide Order No: Nill were supplied vide Invoice No: SA: 002 dated 21-05-2005 and installed on 21-05-2005.

The above equipments are working satisfactorily.

Trichy Diabetes Speciality Centre (P) Ltd.,

Thanking you,

With regards,

Dr.V.Ravindranath,
Managing Director.

PSG HOSPITALS

AVANASHI ROAD, PEELAMEDU, COIMBATORE 641 004, INDIA

October 16, 2012

TO WHOMSOEVER IT MAY CONCERN

This is to declare that the equipments Vascular Doppler model Versalab Auto Unit serial no. D70911022 , Neuropathy Analyser model Vibrotherm – Dx, Unit Serial No. V20911211 and A Simple Colour Planter Pressure Measurement model PODIASCAN, purchased from M/s. DIABETIK FOOT CARE INDIA, 18/1, Kannapanagar 3rd Main Road, Thiruvanmiyur, Chennai – 600 041., vide Order No.09H00132 dated 23.10.2009 were supplied vide Invoice No.SA/2K9/173 dated 13.11.2009 and installed on 16.11.2009.

The above equipments are working satisfactorily.

VIMAL KUMAR GOVINDAN
MEDICAL DIRECTOR
Dr. Vimal Kumar Govindan, M.Ch.
Medical Director
PSG Hospitals
Peelamedu
Coimbatore - 641 004.

Dr. Srinivas .S

[illegible]

Apollo

TO WHOMSOEVER IT MAY CONCERN

[illegible] (Doppler based ABI), Vibrometer (Biothesiometer) and Podiascan (Planter Pressure System) a product of M/s. Diabetik Foot Care India, Chennai has been in use at the Sugar Clinic based at Apollo Hospitals, Hyderabad and other Sugar Clinics in India. [illegible]

Our experience with the product has been very encouraging and we appreciate the support provided by [illegible] M/s Diabetik Foot Care India [illegible] India.

Sincerely,

Dr. S Srinivas

Karnataka Institute of Diabetology

(Registered Autonomous Institute of Govt. of Karnataka)
Sri Jayadeva Institute of Cardiovascular Sciences & Research Campus
Bannerghatta Road, 9th Block, Jayanagar, Bangalore-560 069. India.
Ph: +91-80-2664 7322, 2297 7266 Fax: +91-80-2664 7444
email: info@kidbangalore.in www.kidbangalore.in

Date: October 18, 2012

PERFORMANCE CERTIFICATE

To whom it may concern

This is to certify that the equipments indicated below are supplied by **M/s.Diabetik Foot Care India, Chennai** are performing to our satisfaction. Their after sale service is satisfactory.

Sl.No	Description Of Equipment	Unit SL.No	Supply Date
1	Pheripheral Vascular Doppler- Vasodop	D20810092 / PD004006	30/08/2008
2	Neuropathy Analyser- Vibrotherm DX	V20810167	30/08/2008
3	Cardiac Autonomic Neuropathy System - CANS-504	C50810029	30/08/2008
4	Pedography System- Emed 25/D	1231100-0369-0837-atp369/ HL3652	14/12/2008
5	Portable in Shoe Pedography- Pedar-X/R/5/C	Pedar X/13100516-SN516 HL3652	07/06/2010

The overall performance of the machines are good.

[Dr. M.R. MOHAN]

Speciality Consultant in Pediatric Surgery
Karnataka Institute of Diabetology
(Registered Autonomous Institute of Govt. of Karnataka)
Sri Jayadeva Institute of Cardiology Campus
Bannerghatta Road, 9th Block Jayanagar,
Bangalore - 560 069. India.

JAIN INSTITUTE OF VASCULAR SCIENCES

A Unit of Bhagwan Mahaveer Jain Hospital

Millers Road, Vasanthanagar, Bangalore - 560 052.

October 16, 2012

PERFORMANCE CERTIFICATE

This is to certify that the equipments indicated below are supplied by **M/s. Diabetik Foot Care India, Chennai** are performing to our satisfaction. Their after sale service is satisfactory.

These equipments are installed at various diabetic centers in Karnataka by them and they have trained the staffs of all the centers effectively

Sl.No	Description Of Equipment	Quantity	Supply Date
1	Digital Biothesiometer - **Vibrometer** V110123577 to V110121581	5 Nos	27/12/2010
2	Digital Biothesiometer - **Vibrometer** V111031642 to V111031648	7 Nos	14/03/2011
3	Pheripheral Vascular Doppler - **Versalab Auto** D71103082 to D71103089	8 Nos	14/03/2011
4	Neuropathy Analyser- **Vibrotherm Dx** V21103317 to V21103323, V21103312	8 Nos	14/03/2011
5	Colour Planter Pressure System – **Podiascan** F110112624	1 No	27/12/2010
6	Colour Planter Pressure System – **Podiascan** F11103643 to F11103649	7 Nos	14/03/2011

The overall performance of the machines are good.

Dr. Vinaya, A. S.
Clinical Podiatrist,
Co-ordinator InFoCuS
Jain Institute of Vascular Sciences.

JAIN INSTITUTE OF VASCULAR SCIE -
BHAGWAN MAHAVEER JAIN HOSPITAL
MILLERS ROAD, VASANTHNAGAR
BANGALORE-560 052

Pushpanjali Crosslay Hospital

TO WHOMSOEVER IT MAY CONCERN

We are using following equipments from Diabetik Footcare India:

1. Versa lab auto
2. Vibrotherm DX
3. Podia scan
4. Neurolite
5. Electric Pedicure file
6. Lifedop 500

We are very satisfied with their quality and service.

For Pushpanjali Crosslay Hospital
Auth. Sign.

P Marwah

(Sr. Manager- Biomedical)

Pushpanjali

Fortis
Flt. Lt. Rajan Dhall
HOSPITAL

November 23, 2010

TO WHOMSOEVER IT MAY CONCERN

This is to declare that the equipments Vascular Doppler Model Versalab – Dx (Unit Serial No. D30603105), Neuropathy Analyser model VIBROTHERM Dx (Unit serial No. V20600050) and Cardiac Autonomic Neuropathy System Analyser model CANS 504 (Unit serial No. C50600006) were Purchased from M/s DIABETIK FOOT CARE INDIA, Plot No:38, 2/494, AGS Colony, 3[rd] Main Road, Kottivakkam, Chennai – 600 041, Vide Order No: [illegible] dated [illegible]-2006 were supplied vide Invoice No: SA [illegible] dated 23-03-2006 and installed on 03-04-2006.

The above equipments are working satisfactorily and the after sale service provided by them is satisfactory.

For Fortis Healthcare Limited

Authorised Signatory:

Name: Dr. SHUCHEE MADHUSUDAN

Designation: Department of Diabetes and Metabolic Diseases, Fortis Flt. Lt. Rajan Dhall Hospital, Tel: 42776222, Extn. 6026 / 6021, Fax: 42776221

(Plot Issue)

ILS HOSPITALS

October 19, 2012

To Whom it may concern:

This is to certify that **M/s. Diabetik Foot Care India, 18/1, Kannappa Nagar 3[rd] Main Road, Thiruvanmiyur, Chennai-600 041** are our regular supplier for the products Vascular Doppler for ABI/TBI, Bithesiometer, Electronic Pedicure File, IR Thermometer and Neurolite.

They have supplied their **VERSALAB-DX** (Unit SL No.: **D21101166**; Probe SL No.: **PD010904**) of Doppler system for ABI & TBI, **VIBROMETER** (Unit SL No.: **V111031668**); **PROTOUCH 1000** (Electronic Pedicure File), **IR Thermometer & Neurolite** (Unit SL No.: **L31010021**) for our Salt Lake, Sector-I Main Hospital, Kolkata. We have been associating with them since **April, 2011**.

We are satisfied with their products performance and after sales service. Their product meets our requirement. They have trained our staff to use the equipments effectively.

Their service team visits our hospital on a regular basis to maintain the products.

Their overall performance is good and highly satisfied with them.

FOR ILS HOSPITAL

Dr. GHANSHYAM GOYAL

GPT | ILS Hospitals

Web: www.ilshospitals.com • E-mail: info@ilshospitals.com

GD Hospital & Diabetes Institute
A Unit of Pataka Industries Pvt. Ltd.

April 21, 2011

TO WHOMSOEVER IT MAY CONCERN

This is to certify that the equipments Vascular Doppler Model VERSALAB – Dx, Unit.Sl.No: **D30810204**, and Neuropathy Analyser Model VIBROTHERM – Dx, Unit.Sl.No. **V20810169** was Purchased from M/s. DIABETIK FOOT CARE INDIA, Plot No: 38, 2/494, AGS Colony, 3[rd] Main Road, Kottiwakkam, Chennai – 600 041, on dated 13-10-2008.

The above equipments are working satisfactorily.

For G.D. Hospital & Diabetes Institute

GD DIABETES INSTITUTE AND ... PVT. LTD.
Authorised Signatory

Dr. Shaibal Chakraborty
(Medical Director)

Frequently Asked Questions (FAQ)

General

1. **What make you to come to this Diabetes segment?**
   Diabetes is one of the most dangerous diseases prevalent in today's world. India is not an exception to this and this disease is actually affecting more people that it seems. This prompted this 20 year old company to shift into this business segment.
2. **Where is your Head Office?**
   Our Head Office is situated at CHENNAI.
3. **Do you manufacture on your own or is it a franchise?**
   We are a manufacturing Company and all the products are manufactured and supplied with International standards.
4. **Do you have International certification?**
   We are an ISO13485:2003 certified company and in the process of getting European Certification (CE) for our products.
5. **How big is your Company?**
   We are a fast growing company with dedicated manpower of 35 qualified technical persons across the country to work with our R & D, Marketing, Production, Service and Administration. We own a 7500 sq.ft built-up area for our manufacturing. We do business worth 6.5 million USD annually.
6. **Do you have distributors in India?**
   We prefer to work with our own sales force but we have major distributors in Gujarat and Andhara Pradesh who exclusively work for our products since many years.
7. **How many Institutions or Hospitals you have supplied?**
   Most institutions treating diabetes across the country are our customers. You may refer some of the customers testimonials in this catalog on page 2. We have about 4850 installations of our products across 32 countries.
8. **Do you export?**
   Export is becoming a major share of our sale. Presently our products are working in about 35 countries. Pl refer page 1 for the countries.
9. **Do you have International Distributors for your products?**
   Our International distributor base is slowly expanding and our products are distributed in Australia, China, Denmark, Oman, Malaysia and Nigeria.
10. **Do you import products to market them in India?**
    It is difficult to manufacture all the products and we are representing few finest companies in the world. They are M/s. Novel Gmbh, Germany, M/s.Perimed Instruments, Sweden, M/s.Summit Inc. USA.
11. **What is the space required for setting up the diabetic lab?**
    The minimum required space is 3 x 3 meters to set up a diabetic foot lab with our products.
12. **What are the products do you recommend to start a foot clinic?**
    We don't recommend our products since every centre is unique. However we meet the customer and discuss with them about their need and resources. We help them to identify the right product. Usually one ABI measuring instrument (we have 7 products to offer), one Neuropathy screening instrument (we have 5 products to offer) and one Plantar foot pressure measurement system (we have 4 products to offer) become the minimum requirement.
13. **What is the minimum Pre-installation requirement for your products?**
    3 x 3 meter work space, a patient couch, Table or trolley to keep the instruments, Electrical socket with grounding for the products, stabilizer/UPS/ sine wave invertors, latest computer with Xp(SP3) or Win 7(32bit) operating software and a technician. Do contact us for more details.

14. **Do you accept deferred payments?**

    Normally we don't accept deferred payment but on select cases we do support with Post dated cheques in advance for Indian customers.

15. **Do you give posters in regional languages for all ABI, VPT machines?**

    English and Tamil posters are readily available and we are extending them to other regional languages also.

16. **Do you need specialist to operate your products?**

    Not needed. Any trained para-medical staff can be trained to operate our products. Computer knowledge will be an added advantage.

17. **Do you give any training to operate your equipments?**

    We give adequate training at the time installation at your hospital.

18. **What is the duration of the training?**

    2 days training are sufficient to use the instruments effectively.

19. **Where is the training conducted? In our Hospital or in your company?**

    Training is usually given at your hospital at the time of installation of the products. We also provide training at our place at a nominal charge.

20. **Do you give any certificates for the training?**

    We can give the certificates after the completion of the training, when needed.

21. **Is your company support camp if conducted by customer?**

    We do support our customers when they conduct for the first time but not on a regular basis.

22. **Do you offer sustained training during Warranty or Post warranty?**

    Training at the time of delivery is mandatory and free of cost. Additionally we do offer our training one more time free of charge but subsequent training is charged nominally. Post Warranty customers who are in AMC will get free training and others will be charged.

23. **Do you consider buy back or up-gradation?**

    All our products get updated regularly and we strive to give the best product. When our customers want to change their aged machines, we do buy them back and offer new products with a nominal discount. We do not buy our competitors products. When the customer wants to upgrade their model with new features, we do them with a nominal fee charged.

24. **What are the standard charges to carry out these tests?**

    The facilities offered by every client are unique and hence it is difficult to standardise the charges. However based on our experience with different territory, we can suggest. Do contact our customer support engineers for the data.

25. **What is the frequency of these tests for a diabetic patient?**

    Usually the frequencies of these tests are decided by the doctors depending upon the patient condition. Most of the centres do all the test once annually and depending upon the need the patient may be asked to repeat all the test or few test during inbetween visits.

26. **Why do your products need a computer?**

    Data management with computer are emerging and most of the Corporate hospitals have multi-centre concept and encourage patient to visit any of the centre depending upon their convenience. Sharing the data through hospital management software has become the standard and hence connecting our products with computer are need based. It helps to store the data, produce a quality report and helping to do many calculations with the click of the mouse. Also it is very useful for doing more research and present or publish in journals, medical conferences and exchange opinion with other experts.

27. **Why don't you include PC along with your supply of equipments?**

    We are experts in managing our products. Every customer needs a different PC depending upon his need since they are using it for various purposes. Many of the customers will have their own PC. Due to the fact that it is

being used for many applications the chances of getting computer related issues are higher. We avoid supplying PC due to these reasons.

28. **Why your price is high compared to your competitors?**

    Our prices are based on the standard practices involved in design, manufacturing, marketing, selling and servicing. We don't compromise on quality of product and service and due to this reason we get repeat orders. We don't let down our customers. Our customers are our marketing team.

29. **Do you rent your products?**

    It is our policy not to provide products on rent. We cannot assure the quality once we start the rental service.

30. **Have you supplied to any corporate and government centre?**

    Many corporate hospitals, Government Institutes are our customers. Many Pharma industries also our clients.

31. **Do you participate or sponsor medical conferences?**

    We regularly participate in selective National and International conference related to Diabetes.

32. **Do you have any Quality Control protocols?**

    It is our policy to provide quality products and services that consistently meet the needs and expectations of our customers and the regulatory requirements of our industry. We are an ISO13485:2003 certified company.

33. **Where I can find more information about your products?**

    The information about our product and activities can be viewed from our product catalog, our web site. Our customer support engineers nearest to your place may also explain. The demo videos in our website helps you to learn more. You may call our HQ office through phone nos 044-43564129 / 32514129 / 9380621607 between 9.30 am to 6.30 pm on all working days. You can also get information through email from us.

34. **What will be the life period for your machines?**

    The life period for any electronics is 5 to 6 years usually. But however it depends upon the user and institution. Equipments supplied by us during 1995 are still functioning with few customers.

35. **What are the target markets for these products?**

    There are several target market for this products. Primary Care Physicians, Cardiologists, Diabetologist, Endocrinologist, vascular Surgeon, Plastic Surgeon, Podiatric Foot Surgeon and Orthopedic Surgon are the potential users.

FAQ Service:

1. **Do you have warranty for your products?**

   Our products are warranted for a period of 12 months from installation and there is little exclusion. Accessories are warranted for 90days.

2. **During warranty how many times you visit?**

   It is our policy to visit customers once in every 3 months during warranty. However there is no limit on this.

3. **Is your machine is Trouble free?**

   Mostly our products are trouble free. We take care of the quality in all the departments, however there may be few break downs due to factors beyond our control. Our customer support team takes care of the products in field.

4. **If you claim your machine trouble free then why only 1 year Warranty?**

   The parts imported for manufacture are warranted by the suppliers for one year and hence we are also offering one year for the products.

5. **Do you offer AMC or CMC?**

   We offer Annual Maintenance Contract (AMC) and Comprehensive Maintenance contract (CMC) post warranty period. They will have quarterly visits and 2 emergency visits.

6. **What are your AMC / CMC charges and terms?**

   AMC is charged at 5-8% of the cost and CMC is charged at 15-18% of the cost.

7. **Why Your AMC is high compared to other companies who charge less than 2%?**

   AMC is charged only to maintain the equipments in good working condition so that customer need not worry about unexpected break downs. The percentage is less for high cost products and it increases gradually for the low end products. For example the company selling a product worth 25 lacs at a AMC rate of 2% gets Rs.50,000 whereas the product worth 25,000 gets only Rs.500 for the same rate. How is it possible for the company to make 6 visits with Rs. 500. It is not economically viable for the company and hence our charges are more.

8. **Do you give standby machine incase the equipment fails and needs factory service?**

   We do consider giving standby machines depending upon the availability of spare machine.

9. **How to register a complaint about your product?**

   Service complaints can be lodged by email, sms, or phone. You can call our office phone.044-4356 4129 / 3251 4129/9380621607 or email to mesmedi.com to register the complaint.

10. **What is your down time service?**

    Within the HO and regional Office area usually our person will attend in less than 24 hours and outside it is 48 hours. Places where difficult to reach within a week, we may arrange a standby machine by courier.

11. **Any special maintenance is required for your products?**

    No special maintenance is required. You have to clean the machine as per the user manual every day and protect with a dust proof cover, take care of fluctuating voltages , avoid fluid splash on the products, protect from termites, rats, cockroaches etc., for longer performing life.

12. **How do you clean your probes?**

    Cleaning with moist soft cloth will be sufficient. Sometimes the accumulated sticky gel can be cleaned with any soft detergent and it can be sterilized using alcohol swap. Do no dip it in water or any other solution.

13. **Do your equipments need an UPS / Inverter / stabiliser?**

    In most part of India, the voltage variations and power cut become common and they are frequent. These frequent voltage fluctuation and power cut may damage the parts of the equipments. For longer trouble free life we recommend the use of UPS/ Inverter/ stabiliser.

14. **Do you recommend an Inverter?**

    If the power cut is frequent then we recommend sine wave inverter.

15. **Will your machine work with Generator without any problems?**

    When the generator power is stable there is no issue. But there are few generators produce fluctuations due to over load and in these places a servo stabiliser is recommended.

16. **What is the power consumption?**

    Our equipments work with 230 volts, 50Hz AC power and the power consumption per machine is about 150VA/100Watts.

17. **Will the patient get any shock when you examine them?**

    All our products are protected against electrical shock. Both the operator and the patient are safe guarded against electrical shock.

18. **In case of software CD gets misplaced do you support with free software?**

    Whenever our customer support engineer visits your place, he can help you with the software. He can load the software in the PC, however it is your duty to keep them safely. We may charge you nominally if duplicate software CD are required. We may also charge the courier charges.

19. **How often you recommend calibration?**

    We recommend you to send the machine for calibration once a year. We ensure the tools used for the calibration purpose are periodically calibrated by accredited calibration lab. Due to this reason it is difficult to calibrate the products at customer place. We charge Rs. 2000 – Rs.5000 for the calibration and we issue a calibration certificate. The necessary courier charges apply.

A Closer Look at Non-Invasive Testing Methods For PAD

Whenever one suspects Peripheral Arterial Disease (PAD), the clinician must perform few non-invasive vascular testing methods that are commercially available and widely implemented. They include the ankle brachial index (ABI), the toe-brachial index(TBI), segmental Pressure Study and pulse volume recording(PVR), transcutaneous oxygen monitoring(TCPO2) and skin perfusion pressure(SPP).

Ankle Brachial Index:

The ankle brachial index is the most well-known, non-invasive vascular testing tool. ABI test is performed with a Doppler and a blood pressure cuff. One calculates the ABI by dividing the ankle pressure by the brachial systolic pressure. An ABI of < 0.9 is abnormal and ABI values have a linear correlation with wound healing potential in lower extremity wounds. Patients with DM may have calcified and hardened lower extremity arterial walls that cannot be readily compressed and occluded with blood pressure cuffs. This produces falsely elevated ankle pressure readings that are often in the "normal ABI range" (0.9 to 1.2) or sometimes in the non-physiological range of above 1.3. However, Calcified leg arteries in Diabetes Mellitus or dialysis patients may yield falsely elevated ABI results.

Toe-Brachial Index:

The digital arteries in great toes are considered to be less affected by medial arterial calcification. One would calculate TBI by dividing the blood pressure of the great toe by the systolic brachial blood pressure. Toe pressure of $>$ 50mmHg is considered normal. Toe pressure $<$ 30 mmHg is considered severely ischemic.

Segmental Limb Pressures:

Once the ABI has been performed, segmental limb pressure measurement can aid in localizing stenosis or occlusions. Limb pressure cuffs are placed on the thigh, below knee, ankle and digit. The pressure at each segment is measured. A difference in pressure of $>$30 mmHg between the cuff sites suggests a significant arterial stenosis or occlusion present between the site.

Pulse-Volume Recording:

Pulse-volume recordings (PVRs) are plethysmographic tracings that detect changes in the volume of blood flowing through a limb. Using equipment similar to the segmental limb pressure technique, pressure cuffs are inflated to 65 mm Hg, and a plethysmographic tracing is recorded at various levels. A normal PVR is similar to a normal arterial pulse wave tracing and consists of a rapid systolic upstroke and a rapid down stroke with a prominent dicrotic notch. With increasing severity of PAD, the waveforms become more attenuated with a wide down slope and, ultimately, virtually absent waveforms.

Transcutaneous Oxygen Monitoring - TCPO2:

Transcutaneous oxygen monitoring (TCOM) and skin perfusion pressure (SPP) are valuable tools in the wound care setting. As these methods are unaffected by calcified arteries and a higher pressure reading clinically correlates with increased wound healing potential. In addition, both devices allow strategic sensor placement in various locations around foot and ankle wounds. When combined these tools provide specific information relative to leg ischemia, wound healing potential, optimal amputation level and incision site determination for the lower extremities. Normal values are $>$ 50 mmHg. Wound healing potential drops as TcPO2 values decline. Traditionally, 30 mmHg is correlated with a diagnosis of severe PAD or critical limb ischemia (CLI). Transcutaneous oxygen monitoring is a clinically validated tool that reveals a linear correlation between higher partial pressure oxygen reading and wound healing potential. The test is not affected by calcified leg arteries.

Skin Perfusion Pressure - SPP:

Skin perfusion pressure is an alternative technology to TCOM for assessing the perfusion status of skin or "skin capillary blood pressure." Using the laser Doppler and pressure cuff in combination, provides the SPP measurement in mmHg. Normal perfusion for lower extremity SPP values is $>$ 50 mmHg. A SPP measurement between 30 and 50 mmHg is diagnostic of PAD while an SPP measurement of $<$ 30 mm Hg is diagnostic of severe PAD or CLI. The SPP is a clinically validated tool with a strong correlation to wound healing potential. The test is not affected by calcified leg arteries. Clinicians can measure SPP in plantar skin and in edematous limbs.

Product Selection Chart to measure ABI, TBI and TCPO2.

Test	L150R	Versadop ABI	Versalab LE	Versalab Dx	Versalab Auto	Periflux PF5000	
Ankle pressure ABI	X	X	X	X	X	X	ABI values below 0.9 are indicative of PAD. Values above 1.40 should always be confirmed with toe pressure or other techniques. (TASC II)
Toe pressure, TBI			X	X	X	X	ABI values below 0.9 are indicative of PAD. Values above 1.40 should always be confirmed with toe pressure or other techniques. Diabetics and other patients with suspected calcified vessels should always be tested using toe pressures. Toe Pressure Index under 0.7 are abnormal. (TASC II)
PVR					X	X	Qualitative assessment relying on the interpretation of the graphical output and the location of the PVR measurement. (TASC II)
$tcpO_2$						X	Values below 30 mmHg are considered critical. (TASC II)
Heat controlled laser Doppler						X	Values above 20 perfusion units during heating and an increase greater than 150% compared to the baseline value predict wound healing. (Wound care practice, edited by Paul Sheffield et al. Best Publishing Company 2004, p 117-156)
SPP						X	Skin Perfusion Pressure (SPP) reflects the local pressure in the microcirculation. It has been successfully employed for amputation level determination, in particular major amputations
PC controlled		X	X	X	X	X	Operated from PC, data storage and report generation

ABI=ankle-brachial index, **TBI**=toe-brachial index, **PVR**=pulse volume recording,
$tcpO_2$=transcutaneous oxygen pressure, **SPP**=skin perfusion pressure

BLOOD CIRCULATION PRODUCTS

Hand Held Doppler - LIFEDOP L150R

Hand Held Doppler model LIFEDOP L150R, 8MHz from Summit Doppler Systems, USA works with rechargeable battery widely used for the screening of arterial and venous insufficiency. This vascular ultrasound is an easy tool to find the Ankle Brachial Index (ABI), however the Toe Pressure can not be measured using this Doppler for finding the Toe brachial Index (TBI).

Features :

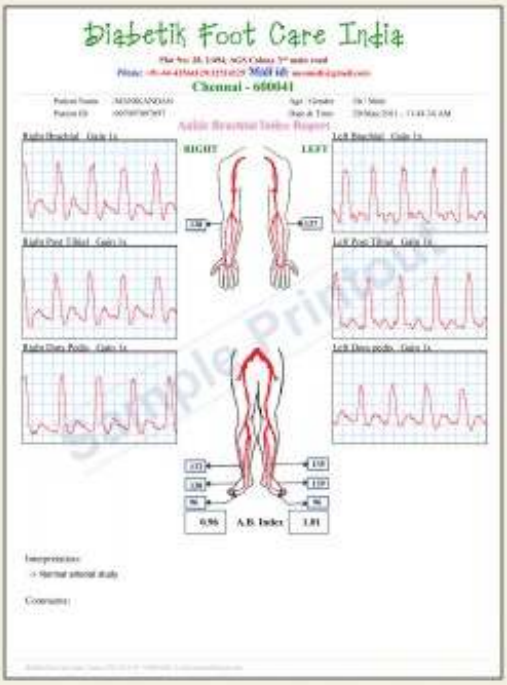
- Doppler Unidirectional 8 MHZ transducer
- ABI Doppler
- Superior Sound Quality SSQ Audio output
- Handy and portable pocket model
- All arterial and venous examination of extremities
- Interchangeable 4 & 5 MHz Doppler transducer option
- When alkaline cell is used, 1250 one minute exams assured

ABI Vascular Doppler VERSADOP ABI

The Versadop Dx is a simple Doppler based A.B. Index machine which is completely computer based.

Features:

- 8 MHz unidirectional Doppler transducer
- ABI cuff sets with manometer
- Manual ankle brachial index study
- Penile flow study
- Gets connected on to any computer- RS232 serial port
- PC software for storage and printout on A4 size plain paper
- Standards matching International specification
- Light weight and portable



Specifications

Power	:	110V~265V, 50~60 Hz AC operated
Frequency range	:	150 Hz to 5 kHz
Speaker output	:	400 mW or more
PC Communication	:	RS232C Serial communication
Dimensions	:	Main unit: (W) x (D) x (H) mm
Weight	:	Approx. 5 kg without accessories
Electrical safety	:	Conforms to IEC 60601-1

ABI / TBI Vascular Doppler VERSALAB™ LE/Dx

The Versalab LE/Dx are complete vascular Doppler system with computer interface. It automatically captures the Doppler and PPG waveforms and calculates ABI and TBI results quickly and accurately. It has a real-time waveform LCD and integrated printer for documentation required.

- 8 MHz unidirectional Doppler transducer
- Photo plethysmography (PPG) for toe pressure measurement
- Segmental cuff sets with manometer for ankle brachial index
- Special Toe cuff is supplied
- Manual ankle brachial index study
- Penile flow study
- Gets connected on to any computer- RS232 serial port
- USB Port option is available
- PC software for storage and printout on A4 size plain paper
- Digital thermal array printer is std in Versalab Dx
- Large LCD screen makes the measurement easy
- All the parameter displayed on the LCD screen
- Standards matching International specification
- Light weight and portable

Automated ABI/TBI Vascular Doppler: VERSALAB™ Auto

The Versalab Auto is a complete vascular Doppler with automatic cuff inflator pump and computer interface. It automatically captures the Doppler and PPG waveforms and calculates ABI and TBI results quickly and accurately. It has a real-time waveform LCD and integrated optional printer for documentation required. Pulse Volume Recordings (PVR) is an optional measurement.

- 8 MHz unidirectional Doppler transducer
- Photo plethysmography (PPG) for toe pressure measurement
- Segmental cuff sets with manometer for ankle brachial index
- Special Toe cuff is supplied
- Automated ankle brachial index study
- Separate mode for complete vascular profile study
- Silent pump inflates of the BP cuff
- Penile flow study
- Gets connected on to any computer- RS232 serial port
- USB Port option is available
- PC software for storage and printout on A4 size plain paper
- Digital thermal array printer is an optional
- Large LCD screen makes the measurement easy
- All the parameter displayed on the LCD screen
- Standards matching International specification
- Light weight and portable

Sample VERSALAB Patient Report Format

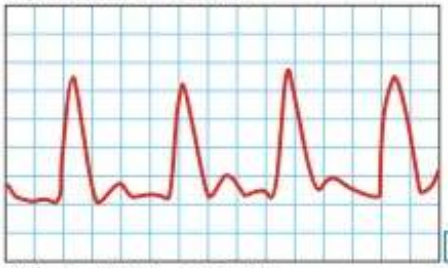
Diabetik Foot Care India

Plot No: 28, 2/494, AGS Colony 3rd Main Road,
Phone: +91-44-43564129/32514129 E-mail: mesmedigmail.com
Chennai - 600 041

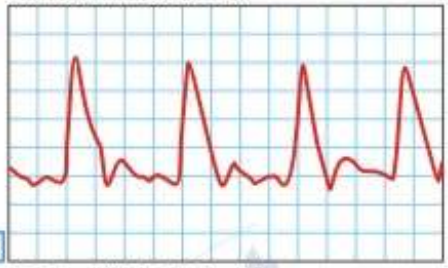
Patient Name	Elango Devy	Age/Sex	:48 / Male
Patient ID	:mes 003	Date & Time	:16/Jan /2009 - 01:551:51 PM

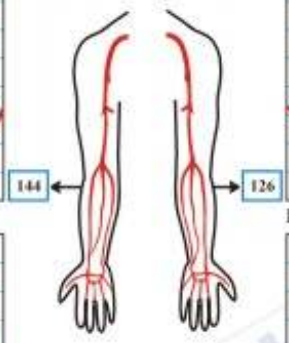
VERSALAB DOPPLER REPORT

Right Brachial G0 BP: 144

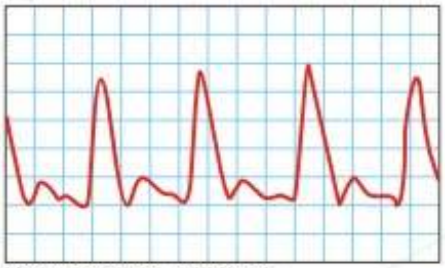


Left Brachial G0 BP: 126

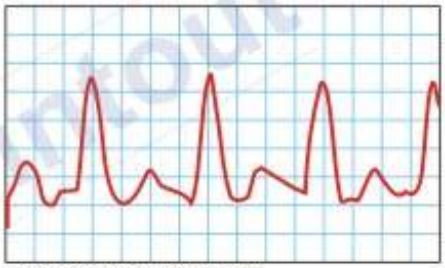




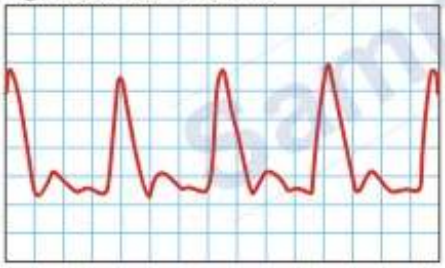
Right Post Tibial G0 BP: 126



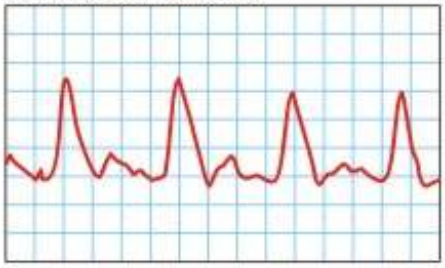
Left Post Tibial G0 BP: 168



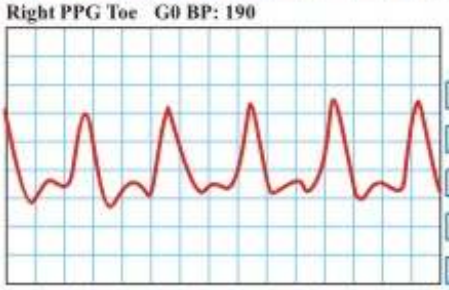
Right Dors Pedis G0 BP: 129



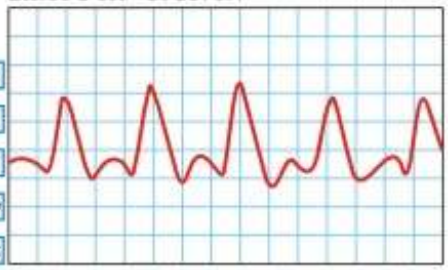
Left Dors Pedis G0 BP: 172

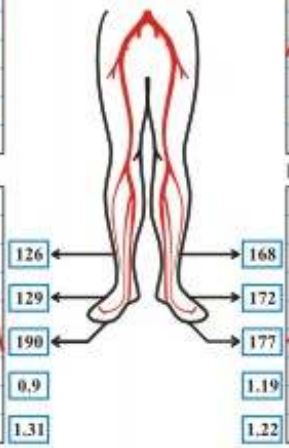


Right PPG Toe G0 BP: 190



Left PPG Toe G0 BP: 177





Interpretation
Normal left arterial study, Mild right arterial disease, Adequate toe pressure

Comments

Dr. Sanjay Ramasamy
Consultant Diabetologist

Transcutaneous Oxygen (TCOM) Monitor – Periflux 5000

Transcutaneous oxygen monitoring (TCOM / tcpO2) is a well-documented technique reflecting the nutritive flow in the capillaries. Today, TCOM / tcpO2 is commonly used in clinical applications such as wound-healing assessment, hyperbaric medicine, amputation-level determinations and more. PeriFlux System 5000 offers the possibility to monitor the transcutaneous oxygen and carbon-di-oxide level at the sites of interest. Remote panel systems are available to facilitate use in hyperbaric chambers. We represent M/s. Perimed, Sweden.

PeriFlux System 5000 – (laser Doppler and transcutaneous oxygen) is a modular system that can be further expanded to include other techniques for diagnosing the peripheral circulation such as peripheral pressures (toe/ankle pressures), Skin Perfusion Pressure (SPP) and Pulse Volume Recording (PVR). This will provide you with a complete solution for vascular assessments, all in one instrument. PeriFlux System 5000 is used in specialist clinics and laboratories worldwide for precise micro- and macro vascular assessments.

Features :

- Modular instrument for multi-parameter assessment of peripheral circulation
- Amputation level/wound healing
- Transcutaneous Oxygen measurement (tcpO2)
- Laser Doppler with heat provocation
- Toe-Ankle/brachial index
- Blood perfusion measurement (laser Doppler)
- Laser Doppler for sensitive detection of very low circulation
- Pressure unit for TBI/ABI/PVR/SPP (laser doppler)
- Automated cuff inflation/deflation
- Heated probes for easy toe pressure measurement
- Software guided clinical assessment (TBI/ABI/tcpO2/heat provocation/PVR, SPP)
- Touch screen operated software
- Automated data storage
- Automated report generation
- User designed reports
- Compatible with Electronic Data Management systems (DICOM)
- Gets connected on to any computer through RS232 serial port or USB
- All the parameter displayed on the LCD screen
- Research (Endothelial dysfunction)
- PORH (post occlusive reactive hyperaemia)
- Iontophoresis
- Vasomotion analysis
- Cold provocations (Reynaud's Phenomenon)

Clinical Applications :

Transcutaneous monitoring of oxygen and carbon dioxide, originally developed for neonatal use, has become a routine measurement in several clinical areas including:

- Determination of peripheral vascular oxygenation
- Quantification of the degree of peripheral vascular disease
- Determination of the optimum level of amputation
- Evaluation of revascularization procedures
- Selecting candidates for hyperbaric oxygen therapy and predicting non-responders to treatment

tcpO2 measurements usually require at least two or three sites to provide a good picture. The more sites assessed, the better the oxygenation picture.

NEUROPATHY: INTRODUCTION

Diabetes is the leading cause of neuropathy in developed countries, and neuropathy is the most common complication and greatest source of morbidity and mortality in diabetes patients. It is estimated that the prevalence of neuropathy in diabetes patients is approximately 20%. Diabetic neuropathy is implicated in 50-75% of non-traumatic amputations.

Uncontrolled diabetes leads to lots of complications in diabetic neuropathy patients. Diabetic neuropathies are a family of nerve disorders caused by diabetes. People with diabetes can, over time, develop nerve damage throughout the body. Some people with nerve damage have no symptoms. About 60 to 70 percent of people with diabetes have some form of neuropathy. People with diabetes can develop nerve problems at any time, but risk rises with age and longer duration of diabetes.

Our ranges of Neuropathy Products help to quantitate the diabetic neuropathy. Today, we have carved a niche as one of the major Neuropathy Care Products Exporters from India.

Monofilaments 5.07/10gm – MF10GM

One of the frequent causes of non-traumatic lower-limb amputation is Diabetes and is usually preceded by foot ulcer and infection. The reason of this ulceration is commonly a loss of protective sensation due to peripheral neuropathy, for which there is no prevention strategy. Current research promotes early detection of neuropathy so that secondary prevention measures, such as intensive foot-care education and treatment, can be used for individuals.

In an effort to standardize and simplify the detection of insensate foot, the 5.07/10-gm Monofilament is recommended by the International Diabetes Federation and the World Health Organization as a device that can be used by health professionals at every level of care.

A standardised filament is pressed against part of the foot. When the filament bends, its tip is exerting a pressure of 10 grams (therefore this monofilament is often referred to as the 10 gram monofilament). If the patient cannot feel the monofilament at certain specified sites on the foot, he/she has lost enough sensation to be at risk of developing a neuropathic ulcer

Features and Information on use:

* Calibrated to buckle for a force of 10gm
* Filament made of Nylon/Polycarbonate
* Simple design
* Patient should be in supine position
* Hold the card between thumb and index finger
* Push the card with filament on the sole of the patient
* Allow the filament to buckle and find whether the patient feels the touch
* Repeat the test at multiple sites as indicated in the cardor as per your choice
* Patient should close his/her eye while the test is done
* Patient should feel the touch in majority of the site
* If not felt then they may have lost enough sensation to be at risk of developing a neuropathic ulcer
* Recommended for single use
* If used cautiously may be used for multiple times for the same patient
* Don't not use it on the wound
* Clean filament after every use
* Card may be personalised

Miniature Biothesiometer VIBRATIP™

VibraTip™: a wipe-clean, pocket-sized and disposable device for testing vibration sense.

Vibration sense is typically one of the first sensory modalities to be impaired as peripheral neuropathy develops.

Graduated tuning forks (e.g. Reidel-Seiffer) and calibrated electronic devices (e.g. Neurothesiometer, Bio-Thesiometer Vibrometer) are recommended to quantify the integrity of vibration sensation.

VibraTip™ is a wipe-clean, disposable, key fob-sized device that provides a constant and reproducible source of vibration. The spherical head facilitates application from any angle and its pocket size means that it is easy to carry and therefore likely to be available at the point of use.

- Easy tool to quantify Neuropathy
- Great motivator to diabetics for better Glycemic control
- Easy operation with hand remote
- Helps detecting Diabetic Polyneuropathy at an early stage

EVALUATING A NEW DEVICE IN THE ASSESSMENT OF PERIPHERAL SENSORY NEUROPATHY IN DIABETES: THE VIBRATIP® STUDY

[1,2]Bracewell NJ, [2]Jeffcoate WJ, [1]Game FL, [1]Scammell BE

Departments of [1]Orthopaedic and Accident Surgery and [2]Diabetes and Endocrinology, Nottingham University Hospitals Trust, UK

AIMS

- To evaluate the sensitivity, specificity, predictive values and likelihood ratios of a new device, VibraTip®, for detecting diabetic peripheral neuropathy (DPN) in routine clinical screening, and to test its intra-rater reliability.

Figure 1: The VibraTip: hand held device for testing vibration sensation

METHODS

- The VibraTip® was compared with the current reference for loss of protective sensation (Neurosthesiometer®), as well as other bedside methods: 10g monofilament, 128Hz tuning fork and Neurotip®.
- 141 patients with type I or type II diabetes were studied. Sensation at five sites (1st, 3rd and 5th MTP heads, pulp and dorsum of hallux) on each foot was assessed with a 10 monofilament, Neurotip and VibraTip and on the hallux tip with a 128Hz tuning fork.
- A Neurothesiometer result at the hallux pulp ≥25V in either foot was considered indicative of DPN. Sensitivity, specificity, predictive values and likelihood ratios were calculated, and receiver operating characteristic (ROC) curves produced.
- Intra-rater reliability calculated using Cronbach's alpha in 18 patients who were tested on two separate occasions.
- The study was reviewed by Trent Research Ethics Committee and all participants gave informed, written consent.

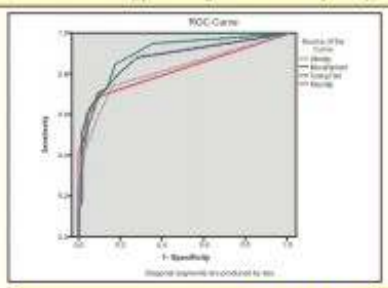


Figure 2: ROC curves for the VibraTip, 10g monofilament, 128Hz tuning fork and Neurotip when compared with sensation testing using

RESULTS

The ROC curves (see figure 2 above) indicated that ≥2 insensate sites from 10 tested across two feet was predictive of a diagnosis of DPN for the 10g monofilament, Neurotip and VibraTip, whereas ≥1 insensate site was predictive for the 128Hz tuning fork.

The sensitivities of the 10g monofilament, VibraTip, Neurotip and 128Hz tuning fork were 84%, 79%, 74% and 69%, respectively. The negative likelihood ratios were 0.19, 0.25, 0.31 and 0.34, respectively.

The 10g monofilament was significantly better than the 128Hz Tuning Fork (p=0.0056) and Neurotip (p=0.0022), but was no different from the VibraTip (p=0.3214).

DISCUSSION

In the detection of diabetic peripheral neuropathy as defined by the use of a Neurothesiometer, the performance of the 10g monofilament and VibraTip were comparable.

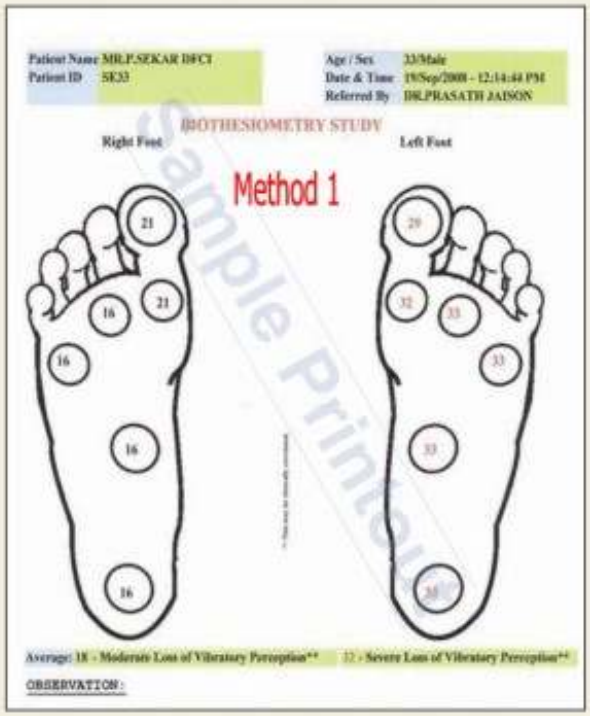
Digital Biothesiometer – Vibrometer ™ VPT

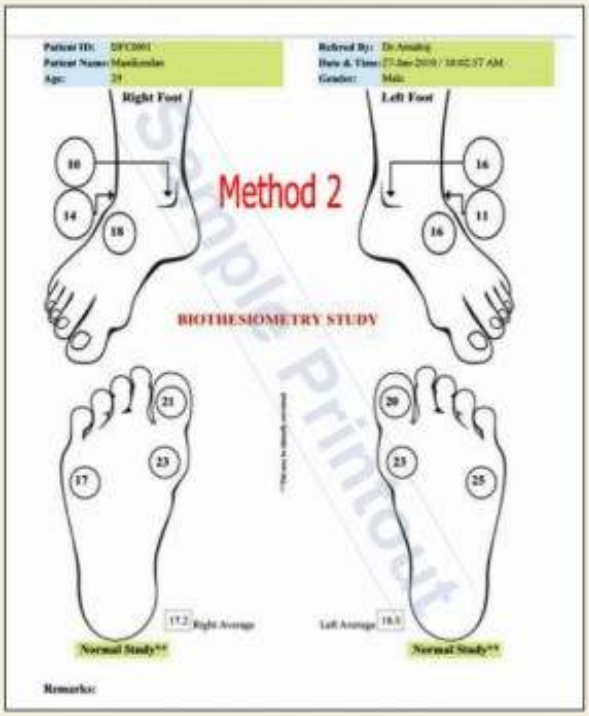
Biothesiometry Vibrometer is a useful non-invasive tool for the detection of subclinical neuropathy in children and adolescents The Vibrometer is used as a research device in many neurological diseases. It is essentially an "electronic tuning fork" whose vibration strength may be gradually increased until the threshold of vibratory sensation is felt by the subject. Alternatively, the vibration strength may be lowered until the vibration is no longer discernible. In all cases the vibration strength amplitude may be determined with high degree of accuracy.

The Vibrometer is not only far superior to a tuning fork in accuracy, but will detect neurological changes that are not disclosed with a tuning fork. It is also quantitative. Biothesiometry method is also used to quantify Erectile Dysfunction.

Features:

- Full solid state Design
- Digital 0 to 50 Volts output indicator
- Electronic Tuning Fork
- Easy tool to quantify Neuropathy
- Over voltage indicated by alarm
- PC enabled
- Works without PC connection also
- Interpretation rules can be changed buser
- Supplied with padded bag for easy carry
- Control Key to check patient perception
- Record Key transfer the data to PC
- Serial RS232 /USB Data transfer facility
- Multiple styles of patient report format
- PC reporting software is simple
- Colourful patient report on A4 size paper
- Modular design makes servicing easy
- Weighs less than 3 Kg





Method 1

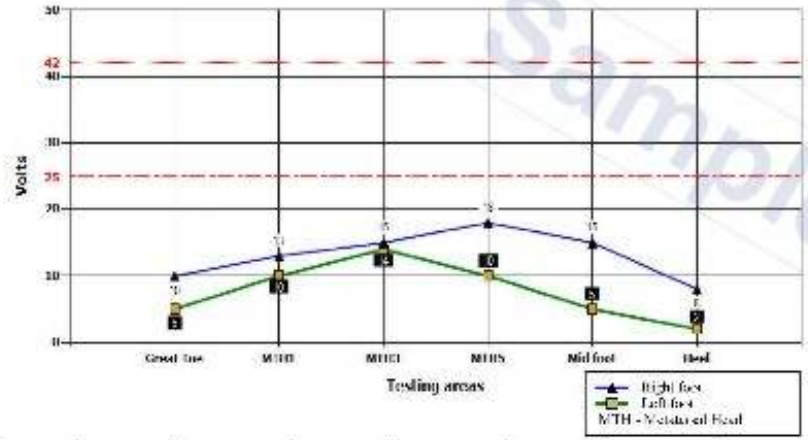
Diabetik Foot Care India

Plot No: 28, 2494, AGS Colony 3rd main road
Phone: +91-44-42564129/32514129 Mail id: mramedic@gmail.com
Chennai - 600041

ID : 170720121253
Name : Mr.MANIKANDAN
Age : 32 Yrs

Gender : MALE
Date : 17/07/2012
Referral : -

BIOTHESIOMETRY STUDY



	Great Toe	MTH - 1	MTH - 3	MTH - 5	Mid foot	Heel	Average
Right foot	10	13	15	18	15	8	13
Left foot	5	10	14	10	5	7	8

Beyond 25 Volts is 7 times more prone to ulceration in a diabetic foot than a normal foot. It is increasing to 23 times beyond 42 volts. (Higher the threshold, higher the risk).

REMARKS :

CONSULTANT : Dr.-
SPECIALISATION : -

Method 2

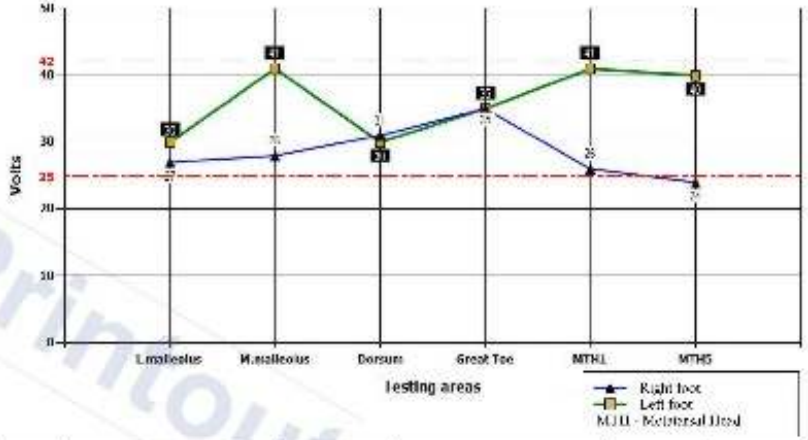
Diabetik Foot Care India

Plot No: 28, 2494, AGS Colony 3rd main road
Phone: 91-44-42564129/32514129 Mail id: mramedic@gmail.com
Chennai - 600041

ID : 17072012253
Name : MR.MANIKANDAN
Age : 32 Yrs

Gender : MALE
Date : 17/07/2012
Referral : Dr.Elango Devy

BIOTHESIOMETRY STUDY



	Lmalleolus	Mmalleolus	Dorsum	Great Toe	MTH - 1	MTH - 5	Average
Right foot	27	28	31	35	26	24	28
Left foot	30	41	30	35	41	40	36

Beyond 25 Volts is 7 times more prone to ulceration in a diabetic foot than a normal foot. It is increasing to 23 times beyond 42 Volts. (Higher the threshold, higher the risk).

REMARKS :

CONSULTANT : Dr.Dr.Parthasarathy
SPECIALISATION : Diabetologist

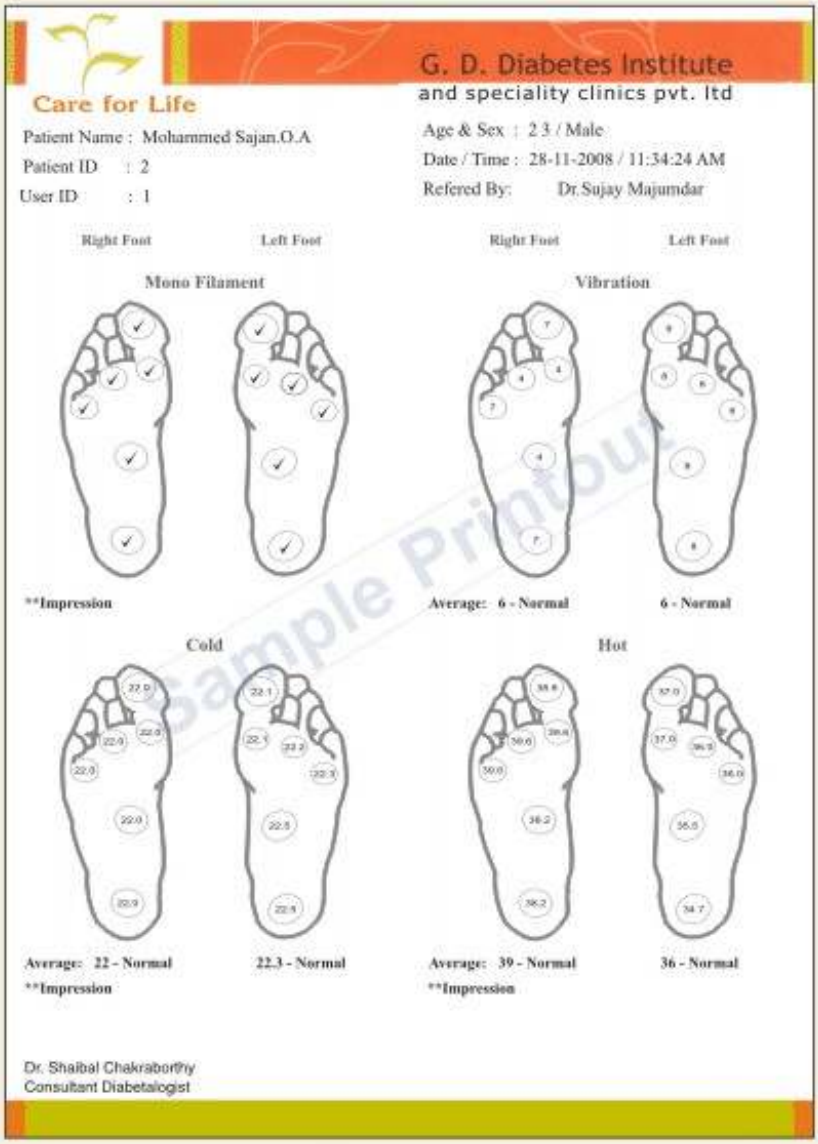
Neuropathy Analyser: Vibrotherm ™ Dx

In diabetes mellitus, polyneuropathy is an important complication and should be diagnosed as early as possible in order to prevent damage to the patient. Determination of warm, cold, and heat pain thresholds enables one to judge small nerve fibre sensitivity.

Neuropathy Analyser model VIBROTHERM Dx is used to measure the loss of vibration and thermal perception thresholds.

Features:

- Full solid state Design PC enabled
- Digital 0 to 50 Volts output indicator for vibration
- Non invasive testing of pain thresholds
- Range : 1^{0} C to 50^{0} C (Restricted for the purpose of safety)
- Rate of change : 1^{0} C per second for Hot/Cold
- Helps to find Cool, Warm, Hot, and Cold Perception Thresholds
- Data storage on Personal Computer.



Cardiac Autonomic Neuropathy System Analyser – CANS504

One of the most overlooked of all serious complications of diabetes is cardiovascular autonomic neuropathy (CAN), which encompasses damage to the autonomic nerve fibers that innervate the heart and blood vessels, resulting in abnormalities in heart rate control and vascular dynamics. It also demonstrates that autonomic dysfunction can affect daily activities of individuals with diabetes and may invoke potentially life-threatening outcomes. Advances in technology, built on decades of research and clinical testing, now make it possible to objectively identify early stages of CAN with the use of careful measurement of autonomic function and to provide therapeutic choices that are based on symptom control and that might abrogate the underlying disorder.

The autonomic nervous system is subdivided into the parasympathetic and sympathetic components that work antagonistically to provide a very fine degree of control over their target organs. In general, the parasympathetic nervous system predominates during rest by slowing heart rate, lowering blood pressure, and promoting digestion. The sympathetic nervous system is responsible for mounting responses to physical and psychological stimuli.

The system uses ECG Cardio-Tachogram (R-R interval) and advanced automatic NIBP (Non-Invasive Blood Pressure) module to conduct a battery of six tests. Being fully automatic, it eliminates the need of manual recordings, readings and calculations. These tests are done with patients co-operation and the PC onscreen panel helps the to complete the tests successfully.

Parasympathetic :

Resting ECG : Resting HR

Deep Breathing :

- Coeff. Of Variation
- Expiration Inspiration Ratio

Supine to Standing :

- Coeff. Of Variation
- 30:15 Ratio

Valsalva Maneuver :

- Coeff. Of Variation
- Valsalva Ratio

Sympathetic :

Postural Hypotension :

- Resting BP
- BP immediately after standing
- BP after standing 1/2/3 minute
- Fall in Systolic BP

Sustained Handgrip :

- Resting BP
- BP after sustained handgrip
- Increase in Diastolic BP

Final Interpretation :

- Parasympathetic Function
- Sympathetic function
- Cardiac Autonomic Neuropathy Function

Diabetik Foot Care India Ltd.

Plot No. 28-2/494 AGS Colony 3rd Main Road
Chennai - 600 041

CANS 504 CARDIAC AUTONOMIC NEUROPATHY SYSTEM ANALYSER

Name : NIRMALA
ID : 15 User ID : PT15
Age : 42 Sex : Female

Test Date : 26 - 03 - 2009 13:02:19

PARASYMPATHTIC FUNCTION

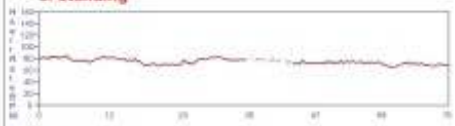
1. Resting Hrt Rate : 67 BPM GRADE 0

2 Deep Breathing

(i).Std.Deviation : 7.27 sec
(ii).Co_Efficient : 5.51%
(iii).E/I Ratio : 1.25
(Normal value > 1.21)

GRADE 0

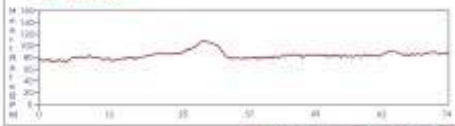
3. Standing



(i).Std.Deviation : 6.47 sec
(ii).Co_Efficient : 4.8%
(iii).30:15 Stand Ratio=1.06
(Normal Value > 1.03)

GRADE 0

4. Valsalva



(i).Std.Deviation : 24.33 sec
(ii).Co_Efficient : 19.46%
(iii).Valsalva Ratio = 1.3
(Normal value > 1.2)

GRADE 0

SYMPATHETIC FUNCTION

1. Postural Hypotention

BP Supine : 132 / 95 mmHg
BP Standing immediate : 137 / 99 mmHg
After 60 Second : 134 / 97 mmHg
Change in Systolic BP : 2 mmHg

GRADE 0

2. Sustained Hand Grip:

Before Grip BP-133 / 96 mmHg
After Grip BP-162 / 114 mmHg
Holding Time 18 mmHg
Change in Systolic BP : 2 mmHg

GRADE 0

Impression
Normal ParaSympathetic Study
Normal Sympathetic Study
Normal CANS Study
This may be clinically correlated [0-Normal,1-Border,line 2-Abnormal]

DR.Kumar M
Engineer

Diabetik Foot Care India Ltd.

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CANS 504 CARDIAC AUTONOMIC NEUROPATHY SYSTEM ANALYSER

Name : NIRMALA
ID : 15 User ID : PT15
Age : 42 Sex : Female

Test Date : 26 - 03 - 2009 13:02:19

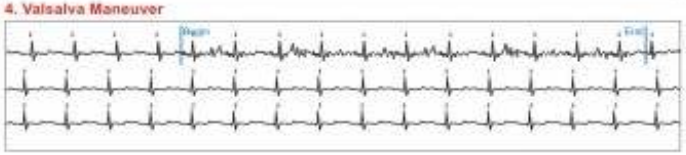
1.Resting HR Rate = 67 BPM

2.Deep Breathing E R-R = 0.93 I R-R = 0.74

3.Response to standing (Supine)

3.Response to standing (Standing) & R-R 30 = 0.89 R-R 15= 0.84

4. Valsalva Maneuver



FOOT CARE PRODUCTS

Foot Impression Foam:

A rigid phenolic foam used by podiatrists for making impressions of patient's feet. This product is sold to distributors of orthopedic footwear and custom orthoses. The foam is fine and soft to prevent skin irritation. Available in 2 depths for effective casting.

Foot Imprinter/Harris Mat – FM1111

The original diagnostic method for foot evaluation. Foot Imprinter Harris Mat is widely used to take the imprints of foot to analyse the plantar pressure variations of the foot. Simple, yet effective, and produces reproducible results when used properly. The foot imprinter displays weight distribution on the plantar surface of the foot. It can easily be used in dynamic gait analysis, static weight bearing and non-weight bearing positions.

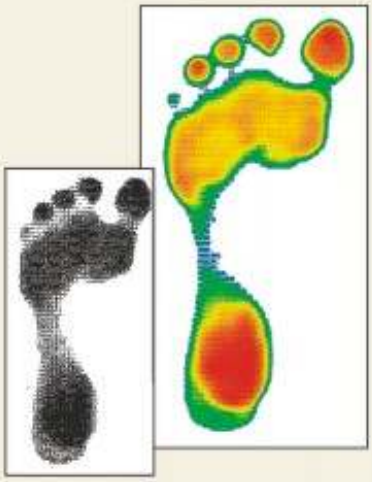
Features:

- Measures patient weight disbursement
- Detects the area of greatest concern for ulceration
- Useful to identify Charcot's arthropathy
- Very light, portable and easy to handle
- Arch of the foot can also be detected
- More the darker area indicates the high pressure
- Presence of Callus can also be detected
- Walking pattern of the patient can also be found
- Easy to find the type of foot
- More than 500 imprint can be taken from a single pad

The set includes the imprint mat, prescription paper, inkpad and roller.

Plantar Pressure System - PODIASCAN

The Podiascan system provides podiatrists and bio-mechanists with an economical and efficient method to measure static and dynamic plantar foot pressure distribution. The Podiascan system produces instantaneous and permanent high resolution image of the pressure distribution across the planter surface. We sell this product only in India. The Harris Mat paper output is scanned and the resultant grey scale image is converted into colour scale.

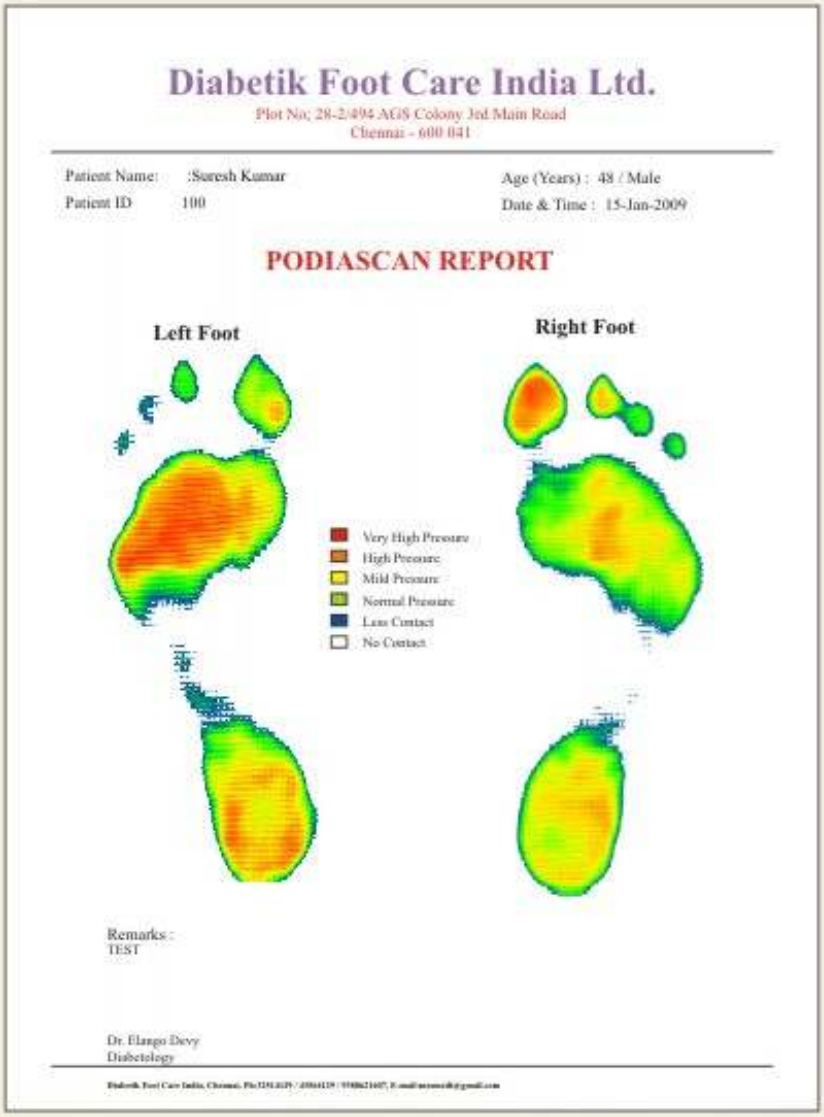


Features :

- System consists of Harris Mat, Special Scanner Copier and Printer, Image Analysis Software and Patient Reporting Software.
- Economical method to measure Static and Dynamic Plantar foot pressure.
- Qualitative multi-colour output makes the pressure reading easier.

Used to Identify :

- Areas of potential ulceration
- Pre and Post surgical evaluation
- Degree of pronation or supination
- Weight bearing after surgery
- Orthotic efficacy



Diabetik Foot Care India Ltd.

Plot No; 28-2/494 AGS Colony 3rd Main Road
Chennai - 600 041

Patient Name: :Suresh Kumar
Patient ID 100
Age (Years) : 48 / Male
Date & Time : 15-Jan-2009

PODIASCAN REPORT

Left Foot

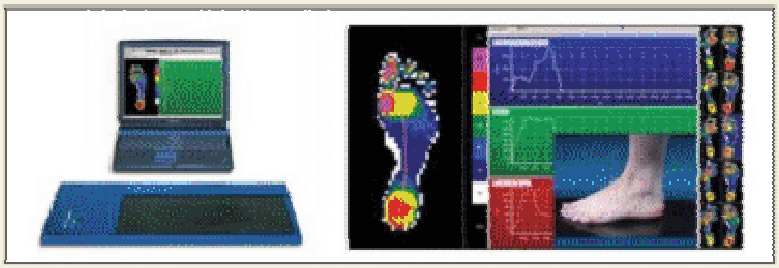
Right Foot

Very High Pressure
High Pressure
Mild Pressure
Normal Pressure
Less Contact
No Contact

Remarks :
TEST

Dr. Elango Devy
Diabetology

Plantar Pressure Platform Pedography System - emed



Pedography is a measuring tool for the early recognition of altered pressure patterns in the individual with diabetes. It was documented that during the walking the neuropathic forefoot. The neuropathic patients also exhibit a "slap" gait. The Charcot of foot displays higher pressure in the midfoot region as compared to the typical diabetic foot pattern. We are the sole distributors of M/s. Novel gmbh, Germany in India.

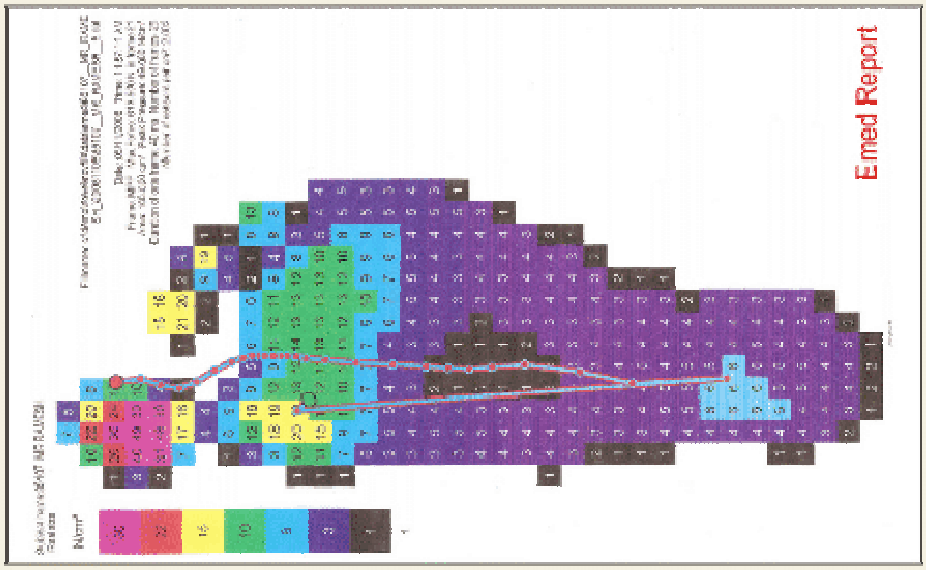
Pedography Platform – emed

emed pedography platforms are accurate electronic systems for recording and evaluating pressure distribution under the foot in static and dynamic conditions. The emed systems belong to the family of novel pedography measurement platforms. All the scientific emed platforms operate with calibrated capacitive sensors. There are different models of emed system available and they are emed-x400, emed-q100, emed-n50, emed-c50, emed-a50 platforms. If you need more information about them, contact us or visit the manufacturer M/s. Novel, Germany.

Features :

- Measures and records foot pressure in static and Dynamic modes.
- Displays foot roll-over frame by frame
- Displays Pressure/Time, Force/Time & Contact
- Area/Time graph
- Displays Gait line(center of pressure)
- Capacitive platform based sensor
- Displays calibrated pressure values for each sensor
- Generates Maximum pressure picture (MPP)
- Prints screen copy or 1:1 foot size
- 2D and 3D pictures of pressure point

  Resolution : 2 Sensors/cm^2 onwards for emed



The in-shoe dynamic pressure measuring system – PEDAR - X

The pedar system is an accurate and reliable pressure distribution measuring system for monitoring local loads between the foot and the shoe. The pedar-X offers the ultimate versatility with its multiple standard features and operating modes. The pedar-X can be tethered to a PC via a fiber optic USB cable. It can function in a mobile capacity with its built-in state of the art Bluetooth technology that is able to communicate with Bluetooth compatible pocket, notebook, or standard PC's. And, as yet another alternative, the pedar-X has a built-in flash memory storage allowing data to be collected anywhere and later downloaded to the computer.

All of these features make the pedar system extremely mobile and flexible to meet virtually all testing needs such as walking, running, climbing stairs, carrying loads, playing soccer, or even riding a bicycle. The results are therefore more relevant to real-life.

The pedar system connects to highly conforming, elastic sensor insoles that cover the whole plantar surface of the foot or sensor pads for the dorsal, medial or lateral areas of the foot. The pedar system allows multiple synchronisation options to use with EMG and video systems for gait analysis.

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The pedar system connects to highly conforming, elastic sensor insoles that cover the whole plantar surface of the foot or sensor pads for the dorsal, medial or lateral areas of the foot. The pedar system allows multiple synchronisation options to use with EMG and video systems for gait analysis.

Applications of pedar systems

- shoe research and design
- aid in orthotic design
- rehabilitation assessment
- kinetic analysis of free gait
- long term load monitoring
- sport biomechanics
- biofeedback

Electric Pedicure File System – PEDINOVA

The Electric File System model Pedinova is a powerful, high performance electric file machine. This is a professional tool used for trimming and shaping toe nails, smooth rough skin like corn and calluses.

Features :

- Motorized electric file system
- Ideal for removing non infective hard skins
- 15,000 RPM with 4 speed
- Supplied with 10 different tool bits
- Integral motor eliminates bulky external motor boxes. All the technology is in the hand piece
- Full warranty for 6 months
- Easy operation
- Used for trimming shaping the hard nails
- Change bits quickly with the auto-locking chuck
- Compact, ergonomic design runs quietly with no vibration
- Extra long electrical cord - plugs directly into wall sockets
- Quality manufacturing from Germany

Non-Contact Infrared Thermometer

Inflammation is one of the earliest signs of tissue injury and ulceration. However, the clinical signs of inflammation are usually too subtle to be detected by patients or even by trained health care providers.

We hypothesized that skin temperatures could be used as a surrogate measure of injury and localized inflammation. Skin temperature measurements can be easily performed and assessed by the lay public and have been used as a diagnostic tool for diabetic foot ulcerations

The aim of this product is to help high-risk individuals identify areas on their feet that are inflamed and prone to ulceration before a wound develops. The patients to record foot temperatures in the great toe, the first, third, and fifth metatarsal head region, the midfoot, and the heel. If skin temperatures were elevated by $>4^{0}F$ ($2.2^{0}C$) compared with the corresponding site on the opposite foot for two consecutive days, subjects were instructed to contact the hospital and decrease their activity until temperatures normalized.

Features :

- Early marker for identifying foot ulcer
- Simple One handed operation
- 3.1/2 digit LCD with back light
- Accuracy +/- 2
- Early marker for Charcot foot
- Laser targeting
- °C / °F select switch
- Wide temperature range

PAIN AND WOUND CARE PRODUCTS

Neuromuscular Stimulator - NEUROSTIM

Neurostim is a drug free, painless answer to eliminating pain and burning.

How does the Neurostim work?

The Neurostim works by stimulating all your nerves from your lower back down to your toes with a specific gentle waveform that your peripheral nerves naturally use to communicate with the rest of your body. The Neurostim sends this waveform from one foot (right) to your knees, to your thigh, to your buttocks, across the synaptic junctions of your lower back, to your other buttocks, thigh, knee, and foot (left). Then it reverses the polarity and sends the signal all the way back to the original foot (right)

How is the Neurostim different than a common TENS?

The biggest difference between the Neurostim and a common TENS is that other devices block the nerve paths. Thus temporarily blocking pain until the device is turned off (with no lasting therapeutic benefit). The Neurostim opens your nerve paths to restore full function. All other devices temporarily treat only pain; the Neurostim permanently eliminates pain.

Does the Neurostim treatment hurt? What does it feel like?

The Neurostim feels good. The signal feels like a tiny tingle that pulses on and off. You can manually adjust the intensity setting for maximum comfort.

How will I know when it is working?

As for the Neurostim itself operating properly, the Neurostim has a LCD display and also a beep sound is heard till the therapy time is completed. This will tell you if the unit itself is generating a pulse. To test the wires that lead to the signal pads, you can hold the rubber conductive electrodes by back of each hand and slowly increase the intensity setting until you can feel it. You can wet skin prior to holding the electrode pads to increase the conductivity if necessary.

As for whether Neurostim is working to reduce the symptoms, usually, during the actual 30 minute treatment session, the sensation of pain will be totally gone, and then you will experience a significant reduction in pain for 2 to 4 hours. Then, this benefit should gradually increase in effectiveness and length of time with each successive treatment. If the patient is taking any pain medications, then the results may take longer until they are reduced with the help of the physician.

Can everyone use the Neurostim?

The Neurostim is safe for almost everyone. As with all medical equipment we suggest that pregnant women and children should not use the Neurostim. It is contra-indicated for patients with certain pacemakers, especially those with the defibrillator accessory. People with epilepsy are suggested not to use this device. Patients undergone cataract may also avoid placing the electrode pads in the face.

NeuroStim is a user-friendly and portable device that sends tiny electrical signals to nerves and muscles. As these signal are exactly like normal nerve signals but much larger, these are able to wake up sleeping nerves and strengthen muscles. These signals travel from one foot, up the leg, across the lower back and then back down the opposite leg to the other foot. Then these reverse their direction and returns to the original foot. This not only successfully treats all the nerves of both legs and feet but also stimulates the muscles of the calves, thus increasing overall muscle tone and blood circulation. It opens up the nerve paths, which re-learn these paths for passing normal signals.

- Relieves Your Pain and Numbness
- Helps You Sleep All Night
- Restores Your Balance and Mobility
- Restores Feeling in Feet and Hands
- Reduces or Eliminates Pain Medications
- Used with the footbath, toenail fungus is eliminated

IMAGINE...

- Walking pain free.
- Your feet feeling refreshed.
- Sleeping all through the night.
- Feeling the carpet under your feet.
- Striding tall, with a firm, confident step.
- Saving money by reducing prescription pain medicines.
- No side effects like fuzzy thinking, tiredness, memory loss.

The NeuroStim has proven to be highly effective in treating a number of conditions, such as:

- Diabetic Nerve Pain
- Peripheral Neuropathy
- Diabetic Peripheral Neuropathy
- Carpal Tunnel Syndrome
- Chronic Inflammatory Demyelinating polyneuropathy
- Muscle Spasms
- Peripheral Arterial Disease
- Venous Stasis
- Stroke Rehabilitation
- Symptoms Related to Lymph Disease
- Symptoms Related to Chronic Fatigue Syndrome

NeuroStim helps in healing by accomplishing the following:

- Stimulates leg muscles to contract and relax thereby increasing blood velocity and volume with fresh blood to the nerves and muscles
- Stimulates all the afferent and efferent nerves in the lower extremities with a signal larger than normal to re-establish the pathways for subsequent normal signals to follow
- Draws axon and dendrite nerve endings closer together to facilitate proper nerve transmission
- Builds residual pain relief each time the system is used
- Causes the brain to release endorphins that reduce global pain and anxiety
- Promotes the healing of non plantar surface diabetic skin ulcers and sprains
- Increases muscle strength for safe, pain free walking
- Reduces edema as muscle contractions encourage lymphatic drainage and movement to the proper nodes Increases collateral circulation

If desired, apply conductive gel to each of the Neurostim's signal pads.

Apply pads to the balls of your feet and turn Neurostim on.

Sit back, relax and enjoy your treatment. (Feels like a massage!)

IR LED Light Therapy - NEUROLITE

Patients with diabetes and subsequent poor circulation are difficult to treat when a patient presents with a history of falls, repeated infections, neuropathic pain and ulcers. It is clear that clinicians who face their patients daily, who present with pain, circulation deficits and psychological issues, need a simple, cost-effective method for the patients to experience relief. Neurolite Therapy is a medical device that emits infrared light at a wavelength of 890 nm along with LED light at a wavelength of 660nm, and can be applied to any area of the body, which may provide a relief for the patients.

Neurolite Therapy device can be utilised safely by a Medicare Professional or by the patient themselves at home. Neurolite Therapy device deliver monochromatic infrared light and visible LED light through therapy arrays, each treatment pad containing 30 super luminous IR diodes and 20 LED diodes. Positive results are expected after 6 treatments of 30-40 minutes duration.

Neurolite Therapy device helps the patient if they can use early on to relieve pain, increase microcirculation, promote healing and relieve muscle spasm, it is possible to decrease pain levels, decrease the number of falls, the number of injuries and the necessity for amputations. It is also possible to increase the patient's level of activities and quality of life, (due to reduction in pain) as well as overall patient compliance and satisfaction.

The 880nm, infrared light produced helps, photo rejuvenation, stimulates fibroblast cell activity in the skin, which increases the production of collagen and elastin—the proteins responsible for skin's tone and elasticity. The effects of infrared LED light therapy on the skin and body have been reported in over 2000 scientific reports and documents. Visible 660nm, Red LEDs don't heat the tissues the way lasers do; because LED uses longer wavelength (redder) near-infrared light, it penetrates the tissues deeper. Clinical applications include treatment of acute pain/injuries, chronic pain and or poor circulation in the extremities, diabetes, vascular diseases, muscle spasm/ stiffness and many more applications.

In addition to an extensive amount of published evidence on the effects of infrared therapy devices with similar wavelengths (810-940nm), there have been many published studies demonstrating positive effects for this kind of therapy. One largest study, involving 2239 patients was published in the Journal of Diabetes and Its Complications (2006). This study demonstrated a mean 67% pain reduction after a clinical treatment program involving a similar product.

Another study involving 493 patients, examining changes in pain levels of lower extremity pain (Diabetic and Non-Diabetic), was published in the journal of Practical Pain Management (2007). This study demonstrated a 64% reduction in pain. Furthermore, this study reported that 51% of patients studied were able to reduce their use of pain medications.

Numbness of Extremities:

Place the pads bilaterally

Plantar Fasciitis:

Place the therapy pad to cover the plantar surface.

Features:

- Infra-red LED and RED led activated
- Continuous or Pulsed operation
- Increase vascular efficacy
- Stimulate the production of collagen
- Stimulate the release of adenosine tri-phosphate (ATP)
- Stimulate fibroblastic activity
- Stimulate tissue granulation and connective tissue projections
- Stimulate acetylcholine release
- Reduce the excitability of nervous tissue
- Benefits Pain and Numbness in Extremities
- Selective wavelengths for improved result
- Built-in timer stops the therapy automatically
- Stimulate the production of collagen
- Increase lymphatic system activity
- Stimulate tissue granulation and connective tissue projections

Specifications:

- Infrared Diodes 880nm, 100mw.
- Red diode 660nm, 4,000 mcd.
- Frequency – 1. User selectable 146, 292, 587, 1174, 2349 and 4698Hz; 2. automatic selection of these frequency in sequence.
- Auto off all units maximum 30 minutes
- Power 100V ~ 265V, 50~60Hz, AC Mains

Electronic Pain Killer - TENS

Electronic Pain Killer T.E.N.S. (Transcutaneous Electrical Nerve Stimulation) is a unique pain management tool that also works as a muscle relaxant. The therapy is uses mild electrical impulses for pain management instead of conventional drugs. The therapy is approved by FDA and is covered by many insurance carriers. It is well established as a safe and reliable pain management system which has been used for decades in USA.

TENS Therapy gently stimulates nerves and blocks pain signals before they can be received by the brain. TENS Therapy is generally used to relieve back pain, but many types and causes of pain may benefit from it, including arthritis. Many scientific literature and researches indicate that electronic pain reliever T.E.N.S. is an effective pain relieving therapy for diabetic and other painful neuropathies.

- 1965 Gate Control Theory created a great popularity of TENS
- TENS has 50-80% efficacy rate
- TENS stimulates afferent sensory fibers to elicit production of neurohumneral substances such as endorphins, enkephalins and serotonin (i.e. gate theory)
- Paresthesia is created without motor response
- A Beta filers are stimulated to SG enkephlin interneuron (pure gate theory)
- Creates the fastest relief of all techniques
- Applied 30 minutes to 24 hours

Features :

T.E.N.S. – I:

- Hand held device Single Channel
- Battery operated unit
- 2 to 50 Hz bi-phasic pulse output
- 0 to 20mA stimulation output

T.E.N.S. – III :

- Table top hospital model
- Dual patient output with adjustable strength
- Built-in timer
- Multiple modulation technique to improve the therapy
- 2 to 120Hz bi-phasic pulse output
- 50 to 500 micro sec adjustable pulse widths
- 0 to 30mA stimulation output

Ultrasound Wound Debrider – UWII

An advanced debriding device utilising ultrasonic waves with a coupling solution such as saline to remove debris and particulate mater from the wound.

Innovative Technique:

The successful removal of necrotic materials and devitalized tissue from a wound is an essential first step towards wound healing. This system offers an extremely thorough debridement, with minimal pain sensation and excellent preservation of healthy, soft tissue. The built in, adjustable irrigation system allows cell debris, bacteria, and exudates to be easily flushed from the wound site, an important element in wound cleansing.

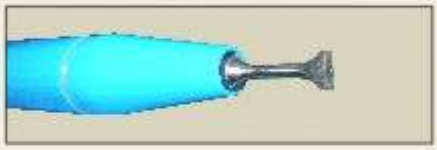
Clinical experience with this system suggests exceptional wound bed granulation, accompanied by significantly reduced bleeding and tissue trauma. The ultrasound generator produce a 22.5 KHz pulsing electrical signal for this purpose. Our handpieces, using highly efficient piezoelectric crystals, converts this pulsing electrical signal to mechanical vibrations. The titanium alloy probe tip of different shape amplifies the mechanical vibration and transfers the acoustic sound energy into the tissue, with the saline irrigation. The resulting cavitation, mechanical and hydrodynamic effects produce tissue disruption, fragmentation and emulsion in the wound bed.

Features:

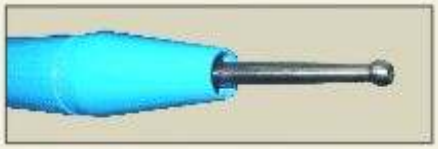
- Simple user friendly design, allows clinicians to fully utilize the system
- Interchangeable probes provide flexibility to address a variety of wound types
- Handpiece with probe tip are fully autoclavable
- Integrated irrigation system helps the wound site for cleaning and maintain a safe wound bed temperature. User may adjust irrigation level from a lower setting for general debridement to a higher setting for wound cleansing.
- Digital display of ultrasonic use time helps to record the ultrasound use time per site

Model: UWI-I

Model: UWI-E (NEW MODEL)

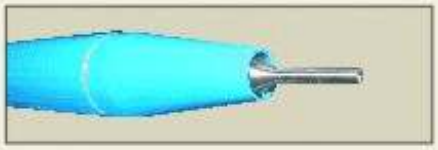


SQUARE: with its broad, wound contact surface, is effective on a wide variety of necrotic material. This makes it ourmost versatile efficient probe for general ultrasonic wound debridement.



SPHERICAL: Designed for use on delicate wounds, ideal for use on pain sensitive patients, curved contact surface with a non-sharp leading edge, facilitate the precise engagement and removal of targeted tissue. Suitable for deep wounds such as fistulous tract.

TRAPEZOIDAL: Makes contact with every shape of the wound and is a general purpose probe.

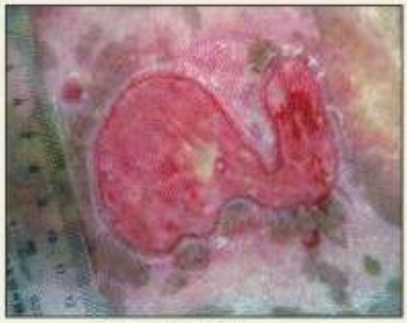


CYLINDER: can effectively penetrate deep, narrow wounds that may need moderate to highly aggressive debridement. Its cylindrical shape, with radially positioned energy directors, is optimized for ultrasonic debridement of tunnel or sinus track walls

Before Ultrasound Debridement

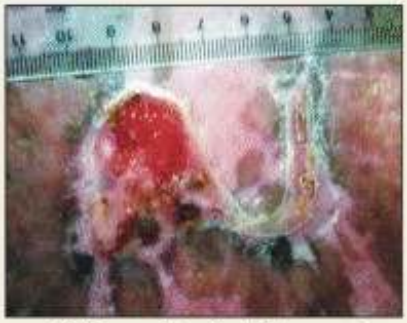
4 times after the debridement

One month and half after



Befor Debridement

6 Days after Debridement



12 Days after Debridement

References:

1. The peripheral arterial disease – The Silent Killer, **Mohammad Kalil Kanjwal**, MD., **Christopher Cooper**, MD., **Riyaz Bashir**, MD.,
2. Doppler determined segmental pressures and wound healing in amputations for vascular disease – **PA Cederberg, DJ Pritchard** and **JW Joyce; J Bone Joint Surg** Am, 1983:65:363-365.
3. Low Ankle Brachial Pressure Index predicts increased risk of cardiovascular disease independent of the metabolic syndrome and conventional cardiovascular risk factors in the Edinburgh Artery Study – **Sarah H Wild, Amanda J Lee, Christopher D Byrne, Gerald R Fowkes and Felicity B Smith.**
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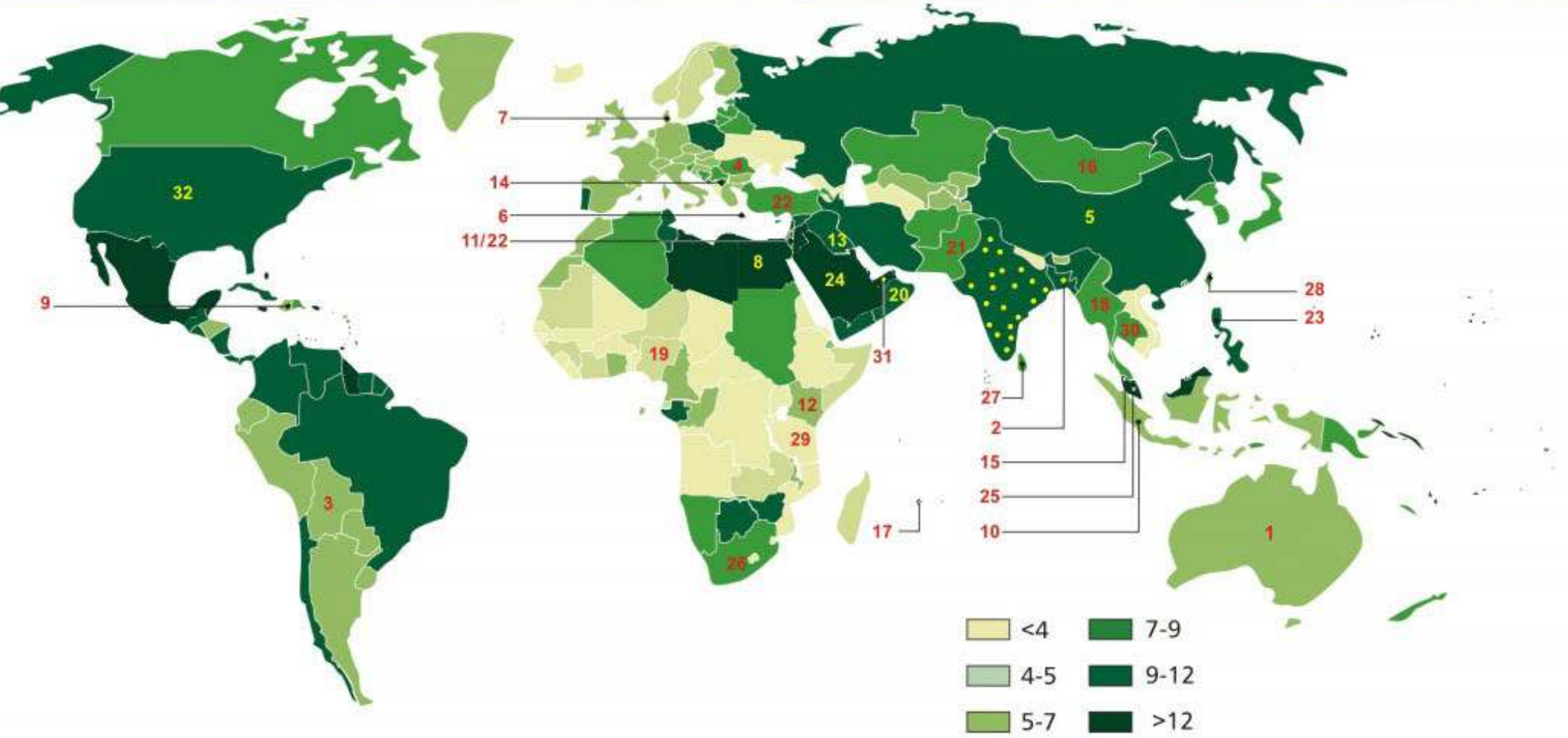
Prevalence (%) of Diabetes in (20-79 years), 2011 (IDF 2011 ATLAS)



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19. Nigeria
20. Oman
21. Pakistan
22. Palestine
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