I.M.A.G.S.B. NEWS BULLETIN

GUJARAT MEDICAL JOURNAL

INDIAN MEDICAL ASSOCIATION, GUJARAT STATE BRANCH

Estd. On 2-3-1945

Office : A.M.A. House, 2nd Floor, Opp. H. K. College, Ashram Road, Ahmedabad-380 009.

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OFFICE BEARERS

PRESIDENT
Dr. Pragnesh C. Joshi — Surat
(M) 98241 87892

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Dr. Bipin M. Patel — Ahmedabad
(M) 98250 62381

IMM. PAST PRESIDENT
Dr. Mahendra H. Chaudhari — Bardoli
(M) 98251 15632

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GUJARAT MEDICAL JOURNAL
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SCIENT. COM. SECRETARY
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Dr. Jitendra B. Patel — Ahmedabad

COLLEGE OF G.P.
Director
Dr. Kirit C. Gadhavi — Ahmedabad

PROFESSIONAL PROTECTION SCHEME
Managing Director
Dr. Mahendra B. Desai — Ahmedabad

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Dr. Vidyut J. Desai — Ahmedabad

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STATE PRESIDENT AND HON. STATE SECRETARY'S MESSAGE

My Dear Friends & Colleagues.....

''Everything in life is TEMPORARY....

If the Going is Good, enjoy as if it won't last forever...

If things are Bad, don't worry, it can't last Forever either...!!!! ''

Many a times, in life we worry unnecessarily and thereby we lose very many happy moments.

We need to have a balanced views and attitudes all the time.

The political scenario of country, the economy, the status of rupee, the terrorist attacks in different parts of the country, the sensitive situation at Pakistan & China borders, the intrusion of enemy's forces in our land, various scams.....The list is endless.....All these factors are enough to cause Depression & Pessimism to all of us. But we need not be panicky....We should not lose hopes. The Largest Democracy in the World is capable enough to weather all storms.

Let us try to work for Brighter India. Unity is Strength.

Motivate your friends to become members of IMA. Take advantage of reduced Membership Fees. Explain the benefits of becoming members of IMA to your friends.

Get ready for GIMACON 2013 on 19th & 20th October 2013. Register your names as Delegates of conference & enjoy the

Hospitality of IMA, Surat. We assure you that it will be a memorable event for all of you.

1st October is National Voluntary Blood Donation Day which is celebrated allover the country to create awareness of safe blood, which is possible only by regular voluntary blood donation. The significance of observance of a day like the National Voluntary Blood Donation day is to mobilize voluntary blood donors by motivating the potential donors to motivate for the cause of the society. This message has to be conveyed to a large number of people so that voluntary blood donation could become a mass movement. People must understand the importance of blood donation and come forward voluntarily to prevent blood shortages. The healthy voluntary donors should come forward so that safe and adequate blood was available to all those in need.

We request all the presidents and secretaries of all local branches to organize "Blood Donation Camp" programme in collaboration of other NGO & create awareness in public at large, on that day.

Till then, enjoy monsoon.....But take good care of YOUR HEALTH & YOUR PATIENTS' HEALTH....

Before signing off , A PEARL.....

WHENEVER YOU FEEL DOWN IN LIFE, YOU LOSE ALLHOPES IN LIFE.....

JUST CLOSE YOUR EYES AND SAY

'WE HAVE TO PROVE, NOT TO THE WORLD, BUT TO OUR SELF.....'

JAY HIND.....

JAY IMA.....

Your's Truly,

Dr. Pragnesh Joshi
(President, G.S.B. I.M.A.)

Dr. Bipin M. Patel
(Hon. State Secy., G.S.B. I.M.A.)

STATE PRESIDENT - HONY. SECY. & OFFICE BEARERS TOURS/VISIT

20/01/2013 Dr. Pragnesh C. Joshi; President, attended Presided the seminar organized by Surat Branch.

27/01/2013 Dr. Pragnesh C. Joshi; President, attended Inaugural Function of IMA CGP lecture series organized by I.M.A. Vadodara Branch.

02/02/2013 Dr. Pragnesh C. Joshi; President, attended National Conference AFPANATCON-2013 at Ahmedabad.

19/02/2013 Dr. Pragnesh C. Joshi; President, attended Presided over the Function & Workshop on "DOTS IN TB & MDR TB" at Hotel Embassy, Surat.

03/03/2013 Dr. Pragnesh C. Joshi; President, & Dr. Bipin M. Patel; Hon. State Secretary, attended meeting of State President & Secretaries at IMA HQs, New Delhi.

16/03/2013 Dr. Pragnesh C. Joshi; President attended State Working Committee meeting at Devka Beach, Daman.

22/03/2013 Dr. Pragnesh C. Joshi; President, attended & Led the Rally along with Mayor of Surat on the occasion of World TB Day-2013 organized by Surat Municipal Corporation - DOTS..

07/04/2013 Dr. Pragnesh C. Joshi; President, , Dr. Bipin M. Patel, Hon. State Secretary, Dr. Mahendra B. Desai; Managing Director, P.P.S. attended P.P.S. Zonal Educative Seminar & AMACON-2013 organized by I.M.A. Ahmedabad Branch.

21/04/2013 Dr. Pragnesh C. Joshi; Presidentattended Installation Ceremony of President of SMCA-Surat Medical Consultants Association at Surat.

27/04/2013 Dr. Pragnesh C. Joshi; President, attended Installation Ceremony of President of Association of Physicians of Surat.

16/06/2013 Dr. Pragnesh C. Joshi; President, Dr. Mahendra B. Desai; Managing Director, P.P.S., Dr. Anil J. Nayak attended P.P.S. Zonal Educative Seminar by I.M.A. Mehsana Branch.

22/06/2013 Dr. Pragnesh C. Joshi; President Visited I.M.A. Wankaner Branch & held meeting with its President & Secretary.

23/06/2013 Dr. Pragnesh C. Joshi; President attended programme of Disaster Management & Felicitation of Senior Doctor organized by I.M.A. Morbi Branch at Morbi.

14/07/2013 Dr. Pragnesh C. Joshi; President attended "3rd National Workshop & TOT Programme on Disaster Management" organized by I.M.A. Vadodara Branch at Hari Dham, Sokhda.

22/06/2013 Dr. Pragnesh C. Joshi; President P.P.S. Zonal Educative Seminar & Programme of Doctor's Day Celebration organized by I.M.A. Vadodara branch at Vadodara.

22/06/2013 Dr. Praful R. Desai; Vice President, I.M.A. HQs., Dr. Pragnesh C. Joshi; President P.P.S. Zonal Educative Seminar organized by I.M.A. Navsari Branch at Navsari.

14/07/2013 Dr. Kirit C. Gadhavi, Director I.M.A. C.G.P., Dr. Lalit I. Nayak, Hon. Secretary I.M.A. C.G.P. and Dr. Vasant B. Patel; Hon. Joint Secretary I.M.A. C.G.P. attended C.M.E. program at Ahmedabad

07/08/2013 Dr. Kirit C. Gadhavi, Director I.M.A. C.G.P., and Dr. Lalit I. Nayak, Hon. Secretary, I.M.A. C.G.P. attended C.M.E. program at Gandhinagar

15/08/2013 Dr. Bipin M. Patel; Hon. State Secretary, I.M.A. G.S.B. attended chief guest at Swaminarayan Gurukul, Koteshwar for Flag hosting ceremony on 15th August.

18/08/2013 Dr. Bipin M. Patel; Hon. State Secretary, I.M.A. G.S.B. attended Rim-Zim Annual Function Felicitation/Cultural programme at Jamnagar

* * * * *

NEW LIFE MEMBERS

I.M.A. GUJARAT STATE BRANCH

We welcome our new members

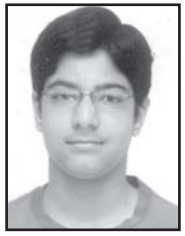
L_M_No.	NAME	BRANCH
LM/22660	Dr. Gadhavi Ketan Mukundray	Himatnagar
LM/22661	Dr. Chauhan Parthiv Rasikbhai	Bhavnagar
LM/22662	Dr. Goswami Pratik Hasmukhvan	Anand
LM/22663	Dr. Patel Rakesh Bachubhai	Bilimora
LM/22664	Dr. Macwana Jayprakashkumar I.	Vadodara
LM/22665	Dr. Dharaiya Nisarg Dilipkumar	Vadodara
LM/22666	Dr. Vidhani Anup Vinodbhai	Vadodara
LM/22667	Dr. Brahme Kalpita Keyurbhai	Vadodara
LM/22668	Dr. Parmar Jagdish Bhogilal	Vadodara
LM/22669	Dr. Mehta Kedar Gautambhai	Vadodara
LM/22670	Dr. Tamboli Dhaval Dinkarbhai	Vadodara
LM/22671	Dr. Upadhyay Krishnachandra	Vadodara
LM/22672	Dr. Shah Biraj Bharatkumar	Vadodara
LM/22673	Dr. Vasava Manoj Ashokbhai	Vadodara
LM/22674	Dr. Sisodia Jitendra Amarabhai	Vadodara
LM/22675	Dr. Daftary Nirali Bharatbhai	Vadodara
LM/22676	Dr. Patel Meghnaben Mafatbhai	Vadodara
LM/22677	Dr. Patel Krunal Hashmukhbhai	Vadodara
LM/22678	Dr. Patel Lipi Krunal	Vadodara
LM/22679	Dr. Jadav Ketan Yashvantrao	Vyara
LM/22680	Dr. Makwana Jayesh Bachubhai	Vyara
LM/22681	Dr. Vasava Sunita Segajibhai	Vyara
LM/22682	Dr. Chandera Rahul Vikrambhai	Veraval
LM/22683	Dr. Solanki Vipul Mensibhai	Veraval

LM/22684	Dr. Thacker Miral Rameshbhai	Bhujkutch
LM/22685	Dr. Shroff Saurin Kiritkumar	Surat
LM/22686	Dr. Hajirawala Esha Rajeshbhai	Surat
LM/22687	Dr. Sheth Jenish Yogeshkumar	Surat
LM/22688	Dr. Sheth Vaibhavi Jenish	Surat
LM/22689	Dr. Shastri Mona Digantbhai	Surat
LM/22690	Dr. Bhandare Madhavi Vijaybhai	Surat
LM/22691	Dr. Patel Kruti Manilal	Surat
LM/22692	Dr. Revdiwala Nikunj V.	Surat
LM/22693	Dr. Viradiya Hiral Babubhai	Surat
LM/22694	Dr. Viradia Shitalben Babubhai	Surat
LM/22695	Dr. Jasoliya Vikramkumar T.	Surat
LM/22696	Dr. Lakhani Paresh Lavjibhai	Surat
LM/22697	Dr. Rajeev Kumar Balkrishna	Surat
LM/22698	Dr. Parikh Sameer Govindbhai	Rajkot
LM/22699	Dr. Shukla Mayur Sureshchandra	Rajkot
LM/22700	Dr. Thoria Punit Savjibhai	Rajkot
LM/22701	Dr. Makwana Nilesh Jethabhai	Rajkot
LM/22702	Dr. Ranparia Kalpesh Babulal	Rajkot
LM/22703	Dr. Rathod Amit Rasikbhai	Rajkot
LM/22704	Dr. Rathod Dipal Amitbhai	Rajkot
LM/22705	Dr. Malek Mohmed Anwar	Rajkot
LM/22706	Dr. Malek Shahenaz M.	Rajkot
LM/22707	Dr. Patel Kavit Jairajbhai	Rajkot
LM/22708	Dr. Patel Krishna Kavitbhai	Rajkot
LM/22709	Dr. Baraiya Mihir B.	Rajkot
LM/22710	Dr. Baraiya Khushbu M.	Rajkot
LM/22711	Dr. Kacha Avruti Rasikbhai	Bhavnagar
LM/22712	Dr. Trivedi Jatam Sharadbhai	Bhavnagar

LM/22713	Dr. Rathod Poonam Bhimjibhai	Bhavnagar
LM/22714	Dr. Naik Nishith Vinodbhai	Navsari
LM/22715	Dr. Odedara Ram Virambhai	Porbandar
LM/22716	Dr. Vadukar Prakash Tulsidas	Porbandar
LM/22717	Dr. Majithia Paras Sharadbhai	Porbandar
LM/22718	Dr. Majithia Swati Paras	Porbandar
LM/22719	Dr. Tapuriah Abhishek K.	Bharuch
LM/22720	Dr. Nayak Jigar Harshadkumar	Nadiad
LM/22721	Dr. Raval Sanjay Bhikhabhai	Nadiad
LM/22722	Dr. Vataliya Dipak Chandrakant	Nadiad
LM/22723	Dr. Prajapati Tejas Thakorbhai	Nadiad
LM/22724	Dr. Naik Jaimin Manharbhai	Nadiad
LM/22725	Dr. Valand Vikram Govindbhai	Nadiad
LM/22726	Dr. Parashar Vinay Surajbhai	Nadiad
LM/22727	Dr. Parashar Karishma Vinay	Nadiad
LM/22728	Dr. Borana Jitendra Mangilal	Palanpur
LM/22729	Dr. Kankaran Hemantkumar	Palanpur
LM/22730	Dr. Nandaniya Mahesh Maldebhai	Veraval
LM/22731	Dr. Nandaniya Daxaben Mahesh	Veraval
LM/22732	Dr. Apra Rina	Surat
LM/22733	Dr. Patel Mayurkumar Mavjibhai	Surat
LM/22734	Dr. Suratwala Sameer S.	Surat
LM/22735	Dr. Suratwala Varsha Sameer	Surat
LM/22736	Dr. Pandya Bhavik Nayneshbhai	Jamnagar
LM/22737	Dr. Bhatt Shyamnandan H.	Bhavnagar
LM/22738	Dr. Solanki Chandresh K.	Bhavnagar
LM/22739	Dr. Lania Ridhdhish Dayalbhai	Bhavnagar
LM/22740	Dr. Lania Sheetal Ridhdhish	Bhavnagar

CONGRATULATIONS

GUJARAT STATE H.S.C. BOARD



SARTHAK SUNILBHAI SHAH

Percentile Rank : 99.99 (A1)
Date of Birth : 15/12/1994
School : Shri N. H. Shah School, Bayad
Hobby : Cricket, General Knowlege,
Line of Interest : Medical
Father Name : Dr. Sunil P. Shah
Mother Name : Dr. Bhavna S. Shah

* * * * *

GUJARAT STATE C.B.S.C. BOARD

SHIV ABHAY SHAH

Date of Birth : 07/09/1995
School : S. R. Public School, Kota
Hobby : Gardening
Line of Interest : Medical
Father Name : Dr. Abhay Shah
Mother Name : Dr. Nita Shah

* * * * *

OBITUARY

We send our sympathy & condolence to the bereaved family

Dr. Chandrakant N. Vakil	11/07/2013	Ahmedabad
Dr. Vipin N. Pandya	19/04/2013	Ahmedabad
Dr. Vrajlal H. Patel	24/06/2013	Ahmedabad

We pray almighty God their his soul may rest in eternal peace.

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I.M.A. G.S.B. Relief Fund of Uttarkhand on Disaster Management

I.M.A. MORBI BRANCH	₹	45,000/-
I.M.A. MODASA BRANCH	₹	21,000/-
I.M.A. BHAVNAGAR BRANCH	₹	15,000/-
Asharai Con (Dr. Tushar B. Patel)	₹	11,000/-

COMMUNITY SERVICE

MORBI

11/07/2013 Aao Gaon Chalen Project celebration of World Population Day. Rally with school student

14/07/2013 Save Girl Child in cultural event done by group of doctors.

18/07/2013 Study of children- Today's scenario by Dr. Manisha Devani

18/07/2013 Awareness for increase population and various contraceptive methods to control population

Aao Gaon Chalen project poster presentation against Tobacco Consumption and awareness about Cancer.

30/07/2013 World Insulin Day by distributed 20000 pamphlets in news papers to awareness about diabetes and role of insulin in diabetes treatment.

RAJKOT

07/07/2013 Rheumatology Update 200 delegates were attended and learnt about the latest advance and concepts in the management Rheumatological Disease.

IMA Rajkot branch has been able to convince and confirm more than 110 branch members of different specialties who are practicing in Rajkot, to give regular discounts in consultations, hospitalization, surgery and Investigations to all the members of the "Prashil Park Senior Citizen Club" of Rajkot which has more than 1500 members. These discounts have been promised for the next 3 years after which the decision will be reviewed.

An Essay competition for IMA Rajkot MEMBERS ONLY was organized on the subject: "DOCTOR - PATIENT RELATIONSHIP". 19 doctors submitted their entries/essays, and the results will be declared in August. The Essays were judged by senior eminent doctors of the city who were blinded to the names of the candidates, and also the names of the other judges, so that an honest and unbiased result can be assured.

BRANCH ACTIVITY

AHMEDABAD

04/08/2013 "Neuro update" Dr. Ganapathy from Chennai

11/08/2013 A novel programmed was organized Bhaag Doctor Bhaag. The aimwas to promote healthy life style among doctors and dispel the myths. A sports man who is limca book of record holder shares his journey of hard work and success. Large numbers of members of attended the programmed

13/08/2013 "Excellent talk “g”" by Dr. Kumarpal Desai

14/08/2013 The office bearers of AMA had meeting with representative from SEWA for discussing the upcoming project about teenage counseling.

14/08/2013 Dr. Monaben Desai, Vice President, AMA had meeting with Mayor Ahmedabad Municipal Corporation for joining hands with AMA for adolescent health problems

24/08/2013 Respiratory update was held in association with Association of Chest Physicians of Ahmedabad

GANDHINAGAR

04/08/2013 "Creating values in doctors" by Dr. Anil Chauhan

"Treatment of common cancers" by Dr. Abhisek Kakroo

KALOL

30/07/2013 "Non-Alcoholic Liver Disease" by Dr. Jignesh B. Patel

"Why mother does not reject baby?" by Dr. Dinesh H. shah

MORBI

13/07/2013 "Pediatric hemato-oncology" by Dr. Babita Hapani

"Diarrhea Practice" by Dr. N. N. Kanzaria

16/07/2013 "Vertigo, Neurological point of view" by Dr. Mehul Patel

"Consent in Medical Practice" by Dr. N.N. Kanzaria

27/07/2013 "Common pediatric skin problems" by Dr. Jayesh Sanariya

"Infectious diseases" by Dr. Ramesh Boda

30/07/2013 "Vitamin D Deficiency – Beyond Bones – Role in chronic disease" by Dr. Nilesh Detroja

"Ergonomic care in daily routine, especially for doctors" by Dr. Bhavesh Thoriya

RAJKOT

25/07/2013 "Management and isolation protocols for CCHF" (Congo Crimean Hemorrhagic Fever) by Dr. Kamlesh Upadhyay

VALSAD

24/07/2013 "Management of MALARIA" by Dr. Sandeep Desai

"Dengue Fever" by Dr. Kalpesh Patel

"Update on Leptospirosis" by Dr. Kantibha Patel

"Over view on Infections Hepatitis" by Dr. Devang Desai

* * * * *

FUTURE CONFERENCE

AMC MET Medical College

Date : 19/10/2013 & 20/10/2013

Venue : L.G. Hospital Campus, Maninagar, Ahmedabad

Tele No. 079-25472101 to 25472109, Fax No. 079-25472100

Website : www.amcmetmedical.org

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NATIONAL LIVING WELL WORKSHOPS FOR PREVENTION AND MANAGEMENT OF DIABETES AND HYPERTENSION

The upcoming Living Well Program

Date: 8th to 14th Sept.2013.

Venue: Gujarat University Convention Hall, Helmet Circle, Ahmedabad.

Time: 6.00 a.m. to 9.30 a.m.

Contact : 9998315435,9879521061.

Early registration benefits available.

GRAM: "INMEDICI" PHONE & FAX: (079) 265 87 370

INDIAN MEDICAL ASSOCIATION GUJARAT STATE BRANCH

AMA House, Opp. H. K. College, Ashram Road, Ahmedabad-380009.
Email: imagsb@youtele.com & imagsb@gmail.com

Rate of Advertisement

Revised rates of advertisement in journal & bulletin effective from 1st September, 2012

	POSITION OF ADVT.	JOURNAL		BULLETIN	
		FOR MEMBERS	*FOR NON-MEMEBRS*	*FOR MEMBERS*	*FOR NON-MEMEBRS*
A	Inside FullPage	RS. 7,000-00	RS. 8,000-00	RS.6,000-00	RS. 7,000-00
B	Inside Full Page (Multi Colour)	RS.14,000-00	RS.17,000-00	RS.10,000-00	RS.13,000-00
C	Half Page	RS.3,500-00	RS.4,000-00	RS.3,000-00	RS.3,500-00
D	Quarter Page	RS.2,000-00	RS.2,500-00	RS.1,500-00	RS.2,000-00

- The size of Bulletin Full page 120 x 190 mm, Half Page 120 x 85 mm and Quarter Page 60 x 85 mm.
- The size of Journal Full page 190 x 250 mm, Half Page 190 x 125 mm and Quarter Page 85 x 125 mm.
- The advertiser will have to send hard copy with c.d. He/she will have to bear all expenses.
- 5% discount on yearly contact. Please draw your Cheques/D.D. in favour of **"Gujarat Medical Journal"**
- Limited company & private hospital run by more than one doctor will be charged as non member.

N.B.

The Gujarat Medical Journal & Bulletins are circulated amongst 21500 members of I.M.A. Gujarat State Branch. The Journal is also posted to various teaching instutions of India and State Presidents / Secretaries of Medical Association. Non-member can subscribe on payment of Rs. 250/- for the year.

PROFESSIONAL PROTECTION SCHEME
GUJARAT STATE BRANCH, IMA

"P.P.S. HOUSE", Beside Sakar -V, Building, Nr. Mithakhali Railway Crossing,
Off Ashram Road, Navrangpura, Ahmedabad -38 00 09.

(Reported by Dr. Mahendra B. Desai, Managing Director, P.P.S.)

Sub.: Annual Report & Statement of Account

The office has received back the Annual Report of the following members with postal remarks as 'left' or 'Not Known'. The concerned members are requested to notify immediately change of their addresses to the P.P.S. Office directly.

P.P.S. No.	NAME	CITY
3226	Dr. Asopa Uma Vijendra Nath	Ahmedabad
2955	Dr. Chalishazar Urmil Kirtikant	Ahmedabad
5238	Dr. Chandrana Anish Harjivandas	Ahmedabad
10667	Dr. Chaudhari Rajesh R.	Ahmedabad
4260	Dr. Chaudhari Ashaben Keshubhai	Ahmedabad
961	Dr. Chhaya Rekha Piyush (Mrs)	Ahmedabad
1003	Dr. Dalal Jaykrishna Manubhai	Ahmedabad
8970	Dr. Desai Ava Dipan	Ahmedabad
1569	Dr. Desai Ramesh Jashbhai	Ahmedabad
1568	Dr. Desai Rohini Ramesh	Ahmedabad
3899	Dr. Devanhalli Vijay Govinda	Ahmedabad
8156	Dr. Dusia Smita Hari	Ahmedabad
8155	Dr. Dusta Hari Ramchand	Ahmedabad
6662	Dr. Gosai Arvindbharthi Rameshbharthi	Ahmedabad
1741	Dr. Jhala Chandrakant Ishwarlal	Ahmedabad
1545	Dr. Khamar Bakulesh Mafatlal	Ahmedabad
6287	Dr. Kothari Pankaj Mansukhlal	Ahmedabad
2448	Dr. Panchal Jashbhai Chandubhai	Ahmedabad
1427	Dr. Parekh Mrudul Hareshchandra	Ahmedabad
3801	Dr. Patani Mohammedakil Usmangani	Ahmedabad
1972	Dr. Patel Atul Gordhandas	Ahmedabad
3954	Dr. Patel Divyang Thakorbhai	Ahmedabad

2475	Dr. Patel Jayantilal Prabhudas	Ahmedabad
4511	Dr. Patel Kiritbhai Jayantilal	Ahmedabad
2476	Dr. Patel Madhuben Jayantilal	Ahmedabad
3005	Dr. Patel Mahesh Narandas	Ahmedabad
1680	Dr. Patel Navinchandra Somabhai	Ahmedabad
4609	Dr. Patel Prahladbhairanchhodbhai	Ahmedabad
9738	Dr. Patel Rakeshkumar Kantilal	Ahmedabad
943	Dr. Patel Savjibhai Parbatbhai	Ahmedabad
3157	Dr. Patel Sureshbhai Kadvabhai	Ahmedabad
3310	Dr. Shah Bhadreshbhai Arvindbhai	Ahmedabad
951	Dr. Shah Jayant Narsinh	Ahmedabad
5698	Dr. Shah Kamlesh Navinchandra	Ahmedabad
6986	Dr. Shah Maulin Mahendrakumar	Ahmedabad
2423	Dr. Shah Nilesh Hasmukhlal	Ahmedabad
4981	Dr. Sheth Parag Manoranjan	Ahmedabad
1486	Dr. Trivedi Harsukhbhai Mahipatram	Ahmedabad
1485	Dr. Trivedi Saruben Harsukhbhai	Ahmedabad
3443	Dr. Joshi Rameshchandra Devidas	Anand
5955	Dr. Shah Hitesh Hasmukhlal	Anand
6205	Dr. Chudasama Manish Pragji	Anjar -Kutch
5396	Dr. Charyulu Sreenivasa Maddali Thirumal	Ankleshwar
428	Dr. Khoja Nashir Jasabali	Ankleshwar
3639	Dr. Parekh Nitin Kantilal	Ankleshwar
113	Dr. Shah Chandrakant O.	Ankleshwar
6153	Dr. Arora Rajshree Anupam	Baroda
9277	Dr. Chanpura Vaishali Rajan	Baroda
7744	Dr. Chavdhari Parimal Bhimsinhbhai	Baroda
4823	Dr. Dave Mayookh Ramesh	Baroda
7284	Dr. Desai Jitendra Jashwantlal	Baroda
11871	Dr. Gujarathi Kinjal Harikant	Baroda
4818	Dr. Merchant Sudhir Shantilal	Baroda
4700	Dr. Nayak Jigna Naranbhai	Baroda
4994	Dr. Parikh Dipak Rasiklal	Baroda
6409	Dr. Patel Ami Vivek	Baroda
6410	Dr. Patel Vivek Narendra	Baroda

6740	Dr. Vaghela Kritagnasinh Nrupendrasinh	Baroda
1401	Dr. Champaneria Dhananjay Bhikhubhai	Bharuch
6512	Dr. Sharma Deepa R.K.	Bharuch
2028	Dr. Chauhan Mahipatsinh Laxmanbhai	Bhavnagar
6806	Dr. Fadia Bharat Harnath	Bhavnagar
3685	Dr. Patel Anilkumar Parshotambhai	Bhavnagar
4659	Dr. Patel Kantilal Shankerbhai	Bhavnagar
4764	Dr. Shah Pankaj Amrutlal	Bhavnagar
7229	Dr. Menat Jashvantbhai Lalabhai	Bhiloda
9084	Dr. Bahlla Chetan Subhash	Bhuj - Kutch
4102	Dr. Paladia Damji Manjibhai	Botad
5324	Dr. Shaani Indra Singh Jaswant Singh	Dahod
9527	Dr. Balat Vishal Khimajibhai	Dhanera B.K.
7898	Dr. Koyr Jyoti Prasad	Gandhidham
7846	Dr. Sonpura Ashokkumar Shivrambhai	Gandhidham
5108	Dr. Patel Vikram Bhikhubhai	Gandhinagar
5286	Dr. Shah Kartikkumar Rameshchandra	Ghoghamba
4540	Dr. Sharma Santoshkumar Basantilal	Godhra
1968	Dr. Shah Rangam Chandulal	Himatnagar
6833	Dr. Surti Mahammad Shahidraza	Himatnagar
4218	Dr. Mehta Sunil Ramniklal	Jamnagar
3679	Dr. Takvani Jasumati Harshad	Jamnagar
10438	Dr. Patel Vishalkumar Dhirajlal	Junagadh
925	Dr. Doshi Pankaj Manilal	Kalol
3252	Dr. Jambudi Rajnikant Dahyalal	Kalol
1047	Dr. Patel Natvarlal Keshavlal	Kalol
11434	Dr. Makwana Kalpesh Samatbhai	Keshod
2283	Dr. Sharma Narendrakumar Navneetlal	Khambhat
2677	Dr. Rajput Udayan Babubhai	Mansa
7444	Dr. Patel Hemant Revabhai	Mehsana
2597	Dr. Patel Sanjaykumar Shankarlal	Mehsana
7468	Dr. Patel Shilpa Hemant	Mehsana
7720	Dr. Agrawal Nitesh Nirmalkumar	Nadiad
3553	Dr. Chawda Apoorva Hargovindas	Nadiad
4033	Dr. Gandhi Bharatkumar Thakorbhai	Navsari

1359	Dr. Patel Ishvarlal Chhaganlal	Navsari
2552	Dr. Doshi Rameshchandra Mansukhlal	Palitana
2913	Dr. Chougaonkar Sunil R.	Petlad
5400	Dr. Patel Vipinchandra Gordhanbhai	Petlad
1135	Dr. Vaidya Atul Jayantilal	Petlad
4336	Dr. Balar Shobhana Arvindbhai	Rajkot
6730	Dr. Chhaya Vrajeshchandra A.	Rajkot
4039	Dr. Dholakia Devangi Paresh	Rajkot
7240	Dr. Manvar Kalpesh Govindbhai	Rajkot
453	Dr. Rathi Jagdishchandra Bhanwarlal	Rajkot
5820	Dr. Tolia Deepak Tarachand	Rajkot
6086	Dr. Afinwala Dipesh Kantilal	Surat
11749	Dr. Chauhan Neelam Mitesh	Surat
5488	Dr. Desai Pankaj Nanubhai	Surat
1698	Dr. Gajiwala Rohit Hiralal	Surat
2278	Dr. Kelkar Lalita Vasant	Surat
6332	Dr. Suryavanshi Ashok Ishverdas	Surat
2367	Dr. Waghmare Nivrutti Kashinath	Surat
4570	Dr. Kulshrestha Mohit Narendrakumar	Surendranagar
1102	Dr. Patel Chandulal Dhanjibhai	Talaja
5013	Dr. Raithatha Nitin Shantilal	V.Vidhyanagar
258	Dr. Xavier Albert D's	Valsad
6108	Dr. Bhastana Shailesh Vrundavan	Veraval
6057	Dr. Kalsaria Bharatkumar Thakarshibhai	Veraval

World Breast feeding Week" between 1st-7th August

1st - 7th August is observed worldwide as the International "World Breastfeeding Week" with the sole aim of promoting the knowledge & benefits of breastfeeding amongst the vulnerable population (pregnant women, lactating mothers & all other women in general).

This year, under the World Breastfeeding Association's global theme "Close to Support : Close to Mothers" various nations from all over the globe made efforts to implement this endeavour in their nations.

India decided to pitch in with a campaign of "7 days, 7 states" to spread awareness.The heralders of this initiative in India were Change Giver Mission NGO (CGM) & **Medical Students Association of India (MSAI) with the help of Indian Medical Association (IMA).** Their joint venture was led up front by Ms. Aayushi Chokshi who was the chief co-ordinator of 4 states for this campaign and the State Director of Gujarat in MSAI.

7th August 2013 : State : Gujarat

No. of Events : 18

Venues : Ahmedabad (12) Baroda (1) Surat (1) Surendranagar (2) Bhavnagar (2)

Target Population : 1500-2000

Activities :

(i) Rural :

Street Plays demonstrating the significance and benefits of breast feeding

Education to the beneficiaries by the doctors from IAP & the volunteers MSAI via posters, ppt presentationz & videos

Interactive counseling with the lactating mothers

Distribution of pamplets

(ii) Urban :

Gathering of the women in various localities of A'bad & imparting health education to them on this topic

Ppt presentations and videos

lectures by doctors from IAP

(iii) Anganwadi :

Gathering 300+ anganwadi workers and educating them on this topic as they are the direct link between the doctors & the target population

Street play & oath taking ceremony

Showcasing videos regarding "breast crawl" "KMC" "Procedure & positions"

ppt presentations & interactive question answer session clearing the myths & misconceptions of the anganwadi ppl

display of poster competition educating the anganwadi ppl graphically

SURENDRANAGAR:

VADODARA

BHAVNAGAR

SURAT

Family Planning Centre, I.M.A. Gujarat State Branch

Respected Members,

Indian Medical Association, Gujarat State Branch runs 9 Urban Health Centers in the different wards of Ahmedabad City.

These Centres performed various activities during the month of July- 2013 in addition to their routine work. These are as under :

01-07-2013 to 31-07-2013 : Intra domestic house to house survey by the centers of Ahmedabad.

28-07-2013 : Mega Medical Camp (Dariyapur-Isanpur)
Total Patients : 1336

Rander - Surat : Vitamin 'A' Solution - 22 Children, Iron : 2000 tablets & Calcium - 2000 tablets, were distributed.

Nanpura - Surat : Vitamin 'A' Solution - 50 Children, Iron : 1000 tablets & Calcium - 2250 tablets, were distributed.

The total number of patients registered in the OPD & Family planning activities of Various Centers is as Follows :

July - 2013

No.	Name of Center		New Case	Old Case	Total Case
(1)	Ambawadi	(Jamalpur Ward)	1180	954	2134
(2)	Behrampura	(Sardarnagar Ward)	1483	386	1869
(3)	Bapunagar	(Potalia Ward)	2056	811	2867
(4)	Dariyapur	(Isanpur Ward)	983	214	1197
(5)	Gomtipur	(Saijpur Ward)	2171	762	2933
(6)	Khokhra	(Amraiwadi Ward)	2918	792	3710
(7)	New Mental	(Kubernagar Ward)	863	199	1062
(8)	Raikhad	(Stadium Ward)	597	1194	1791
(9)	Wadaj	(Junawadaj Ward)	1074	261	1335
(10)	Khambhat		—	—	—
(11)	Junagadh		----	----	----
(12)	Rander-Surat		----	----	----
(13)	Nanpur-Surat		----	----	----
(14)	Rajkot		457	440	897

No.	Name of Center	Female Sterilisation	Male Sterilisation	Copper-T	Condoms	Ocpills
(1)	Ambawadi (Jamalpur Ward)	27	—	68	9870	518
(2)	Behrampura (Sardarnagar Ward)	22	04	60	11200	1188
(3)	Bapunagar (Potalia Ward)	39	---	56	13200	91 Users
(4)	Dariyapur (Isanpur Ward)	40	01	60	17500	728 Pkt
(5)	Gomtipur (Saijpur Ward)	23	---	48	2020	245 Pkt
(6)	Khokhra (Amraiwadi Ward)	29	04	45	6000	118
(7)	New Mental (Kubernagar Ward)	20	---	45	9120	356 Pkt
(8)	Raikhad (Stadium Ward)	47	01	79	10060	951 Pkt
(9)	Wadaj (Junawadaj Ward)	32	—	29	12000	1173
(10)	Khambhat	---	—	---	---	---
(11)	Junagadh	23	—	20	1800	218
(12)	Rander-Surat	31	—	39	1000	80 Pkt
(13)	Nanpura-Surat	22	—	64	1750	120 Pkt
(14)	Rajkot	04	03	60	---	---

65th Annual Conference

INDIAN MEDICAL ASSOCIATION

Gimacon-2013 Surat

19th - 20th Oct. 2013

Pre Conference Workshop : Fri. 18th Oct.-2013

Host : Indian Medical Association, Surat

Surat beckons you...

Dear Sir / Madam,

It is our pleasure to welcome you to the GIMACON 2013, 65th Annual Conference of Indian Medical Association, Gujarat State Branch hosted by Indian Medical Association, Surat. The venues of the conference are Gandhi Smruti Bhavan & Jeevan Bharti High School, Nanpura, Surat.

We are all excited about annual event of the IMA GSB. We aim to provide you the latest information about the enhancing health care with a balance between clinical and transactional research. It will be an opportunity for interaction and learning amongst a wide spectrum of health professionals, who have specialised in their respective fields. It is during this event that participants of all ages from different places will come together to develop friendship network and exchange useful knowledge under one roof. We have also planned to arrange short scientific papers, poster presentations, quiz competitions, along with the interesting programmes for the spouse during these days.

We are happy to announce that Gujarat Medical Council has granted 7 (Seven) credit hours, for this conference.

We hope that through this scientific deliberations, we will be able to fulfill the needs of the Family Physicians as well as Consultants to update their knowledge so that they can use them in daily clinical practice.

Please ensure your early registration and accommodation by contacting GIMACON-2013 office bearers.

Awaiting to greet you at the GIMACON-2013 at Surat.

With warm regards... ... ...

President, IMA GSB & Executive Chairman
Dr Pragnesh Joshi

Organising Chairman
Dr Vinod Shah

Org. Secretaries
Dr Nitin K Garg
Dr Prashant Desai

Hon. Sec. IMA GSB
Dr Bipin Patel

Chairman Reception Comm.
Dr Nirmal Choraria

President, IMA, Surat
Dr. Bhupesh Chawda

Hon. Secretary, IMA, Surat
Dr. Digant Shastri

65th Annual Conference

INDIAN MEDICAL ASSOCIATION

Gimacon-2013 Surat

19th - 20th Oct. 2013

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REGISTRATION FORM

Full Name (Block letters) : _____ _____ _____
Surname Name Fathers'/Husbands' Name

Qualification : _____ Branch of IMA : _____

Mailing Address : _____

_____

City : _____ State : _____ Pin : | | | | | | |

Phone : STD Code _____ (O) _____ (Mob.) _____

E-mail : _____

Medical Council Reg. No. _____ Conf. Reg. No. : _____

Accompanying Persons :

S.N.	Full Name	Relation	Age	Gender	₹
1					
2					

Registration Fees **PATRON : ₹ 11,000/-** || **RC MEMBER : ₹ 3,000/-**

Date up to	IMA Member	Non IMA Member	Accomp. Person	Students up to Internee
30-09-2013	₹ 1000/-	₹ 1500/-	₹ 800/-	₹ 800/-
10-10-2013	₹ 1200/-	₹ 1800/-	₹ 800/-	₹ 1000/-
Spot (Kit not guaranteed)	₹ 1500/-	₹ 2000/-	₹ 1000/-	₹ 1200/-

Note : (1) Accompanying person is not entitled for kit. (2) Medical students must have to submit college authority letter. (3) Registration from 11-10-2013 onward will be considered as Spot.

Bank :	Branch :
Registration : ₹	Cheque / DD No.
Accom. Person : ₹	Date :
Total ₹ : In words	

All payment in cheque/DD drawn in favour of "**GIMACON-2013**" Payable at Surat.

Please send registration form to **Conference Secretariat : Netrang Eye Hospital & Laser Centre**
246, 2nd Floor, Shankheshwar Complex, Opp. Raymond Showroom, Majura Gate, Surat-395 002.
Cell : 098240 58309 Email : drnitinkgarg@yahoo.com, hariharswati@gmail.com

Working Committee meeting Hotel Treatotel, Ahmedabad

Dr Bipinbhai Was a chief guest at Swaminarayan Gurukul,Koteshwar for flag hosting ceremony & Dr Mehul Shelat Was invited guest on 15th august

* * * * *

Welcoming to Dr. Bipin M. Patel; Hon. State Secretary Rajkot Branch

I.M.A.G.S.B. NEWS BULLETIN AUGUST-2013 / MONTHLY NEWS

P.P.S. Zonal Educative Seminar Mehsana Branch

* * * * *

CONGRATULATION

Dr. Anil J. Nayak

(Mehsana)

On being elected as Member of Dental Council of India
by Hemchandracharya North Guj. University, Patan.

SCIENTIFIC UPDATE

Introduction to Central Venous Catheters

Introduction

This article is intended to provide internationally accepted guidelines for central venous access devices including clinical hematology, radiological, anesthetic, critical care and nursing also. The guidelines are intended to provide a useful reference to all concerns. These guidelines relates to the insertion and management of non-tunneled and skin-tunneled central venous catheters(CVC), aphresis catheters, implanted ports and peripherally inserted central catheters (PICC). Hope this proves useful to all concern medical and paramedical staff involved in the care of patients with central venous access devices (CVADs).

Recommendations for Catheter insertion

Following a review of the current literature, which is fully referenced in the body of the paper, the following recommendations are made.

- Patients should receive clear and comprehensive verbal and written information explaining the risks, benefits and care of the catheter. Signed consent should be obtained prior to catheter insertion.
- Nontunnelled catheters are indicated for short-term use when peripheral venous access is impractical.
- Tunnelled central venous catheters are indicated for the repeated administration of chemotherapy, antibiotics, parenteral feeding and blood products, and for frequent blood sampling. They are recommended for patients in whom long-term (>30 days) central venous access is anticipated.
- Fully implanted catheters (ports) are more suitable for children and for less frequent accessing but long-term use, whereas skin-tunnelled catheters are recommended for intensive access.
- Peripherally inserted central catheters should be avoided for inpatient therapy because of limited catheter longevity and increased incidence of thrombosis. They are more suited to ambulatory or outpatient-based therapy.
- Polyurethane PICC allow easier infusion of blood products as greater flow rates are achieved because the thinner walls provide a larger internal diameter of the catheter. The decision to use polyurethane catheters should be balanced against the higher risk of thrombosis with these catheters compared with silicone catheters.

- The number of lumina and diameter of catheters should be kept to the minimum.
- Experienced operators, regardless of speciality, should perform catheter insertion with training, supervision and competence assessment programmes in place. Paediatric specialists should insert catheters in children.
- Catheter insertion should take place in an operating theatre or similar clean environment. Bedside placement should not be performed except in an emergency, apart from PICC placement.
- Rigorous skin cleansing with a chlorhexidine gluconate 2% in alcohol or aqueous solution is recommended prior to catheter insertion.
- Routine antibiotic prophylaxis is not recommended.
- Flushing with heparin vs. normal saline remains controversial.
- Routine replacement, for example, weekly change, of short-term catheters as a means to reduce infection rates is not recommended.
- Dressings should be changed 24 h after catheter insertion and weekly thereafter.
- Securing devices, for example, StatlokTM are preferable to stitches, and lines should not be sewn into or around the vein.
- Needle-free connectors should be used to reduce risk of infection to patients and needle stick injury to staff.
- IV therapy giving sets should be changed every 24– 48 h if used for transfusing blood products, and every 72–96 h otherwise.
- Pre-existing haemorrhagic, thrombotic, or infective problems must be effectively managed before catheter insertion.

Indications for catheter insertion

These catheters are indicated (i) when venous access is poor, (ii) when embarking on prolonged intravenous chemotherapy and/or total parenteral nutrition (TPN), or for repeated administration of blood products, (iii) when intravenous therapy involves drugs known to be venous sclerosants, (iv) when ambulatory chemotherapy is to be given as an outpatient, (v) in the situation of repeated sampling, or venesection.

Choice of catheter

Catheters are categorized into (i) nontunnelled catheters, (ii) tunnelled catheters with anchoring cuff, (iii) implanted ports (iv) apheresis/dialysis catheters (tunnelled and nontunnelled) and (v) PICC. They may have single or multiple lumina and can be open ended or valved. Multiple lumina

catheters are advantageous in patients undergoing stem cell transplantation or chemotherapy where a number of agents and blood products require simultaneous infusion. Blood products may be administered concurrently with another drug/infusion through a dual bore catheter. Multiple lumina catheters are associated with increased morbidity (Farkas et al., 1992; Dezfulian et al., 2003), but in the haematology setting, the increased risk is likely to be offset by the convenience of multilumina catheters, thereby justifying their use. If TPN is being administered, a single lumen central venous catheter or lumen should be dedicated exclusively to this purpose (Pratt et al., 2001). The smallest diameter catheter should be employed, to minimize the risk of catheter-related thrombosis and/or subsequent venous stenosis (Knutstad, Hager & Hauser, 2003). However, it may be difficult to administer blood products via very narrow lumina.

Nontunnelled central venous catheters

In an attempt to reduce catheter-related blood stream infection (CRBSI) rates, various materials have been investigated. These have been reviewed, and antimicrobial/antiseptic impregnated catheters, for example, chlorhexidine and silver sulfadiazine short-term catheters have been shown to be effective in reducing catheter-related blood stream infections, but other types are commercially available. A large randomized controlled trial showed that CVCs coated with chlorhexidine and silver sulfadiazine were associated with a 44 % reduction in colonization and a 79 % reduction in catheter-related blood stream infection (Maki et al., 1997), although the largest study to date, in which the mean duration of catheterization was 20 ± 12 days, failed to show any benefit (Logghe et al., 1997). The use of antimicrobial/antiseptic impregnated catheters is recommended for adults who require short-term (<10 days) central venous catheterization and who are at high risk of infection (Pratt et al., 2001; Pellowe et al., 2003). The debate continues about such catheters and their propensity for inducing antibiotic resistance, and occasional severe allergic reactions have been reported (Cicalini, Palmieri & Petrosillo, 2004).

Tunnelled catheters

Tunnelled catheters are recommended for patients in whom long-term (>30 days) central venous access is necessary (Pratt et al., 2001). Devices exist with and without Dacron anchoring cuffs. Tunnelled catheters have been shown to be associated with lower infection rates than nontunnelled catheters (Randolph et al., 1998). The cuff induces an inflammatory

reaction within the subcutaneous tunnel leading to fibrosis, with catheter fixation usually occurring within 3–4 weeks of insertion. Valved catheters have the advantage of not requiring heparin flushes but may need pressurized infusions to administer blood products. They also tend to be more costly. There is little hard evidence to support one type of catheter over another.

Implanted ports

Ports have been shown to have the lowest reported rates of catheter-related blood stream infections compared with either tunnelled or nontunnelled CVC (Pegues et al., 1992; Groeger et al., 1993). Most ports are single lumen, which makes them more suited to long-term intermittent therapy. They tend to be used more frequently in paediatrics, and in patients with solid tumours (Camp-Sorrell, 1992; Gabriel, 1999). In the adult haematology setting, they may be of use in sickle cell anaemia or thalassaemia, where patients are receiving regular blood transfusions. Ports may also be useful for oncology patients with poor peripheral venous access who are receiving less intensive therapy unlikely to cause prolonged neutropenia. They allow less restricted bathing and swimming and may appeal to patients concerned about the psychological aspects of the presence of the external part of the nonimplanted catheters. They are more expensive to purchase, insert and remove, and they leave larger scars.

Apheresis/dialysis catheters

These can be either nontunnelled (VascathsTM) or subcutaneously tunnelled with a cuff, and a selection is commercially available for longer-term use. They are larger bore catheters and usually require flushing with stronger solutions of heparin to maintain patency (e.g. 5000 U/ml of heparin). The volume of heparin flush used should be equal to the volume of each lumen to avoid systemic heparinization of the patient. It should be noted that for optimum flow rates, it may be necessary to position the tip of the catheter at the junction of the right atrium and superior vena cava (SVC; Vesely, 2003) to avoid irritation/thrombus formation when the catheter tip abuts onto the vein wall (Fletcher & Bodenham, 2000).

PICC

Peripherally inserted central catheters represent a vascular access device (VAD) that can be considered to have an intermediate role in central venous access. These catheters are usually inserted at the bedside via an antecubital vein and are available with single or multiple lumina. In the

haematology setting, they are well suited for ambulatory or outpatient therapy (Whitman, 1996) as opposed to intensive inpatient therapy but have been shown to be associated with a higher incidence of thombosis in patients with haematological malignancies (Cortelezzi et al., 2005). This is an important consideration in patients who have had previous thromboses, and in those who are receiving therapy which may increase the thrombotic tendency like thalidomide. Peripherally inserted central catheters can be made of either silicon rubber or polyurethane, the former being associated with a lower risk of thrombosis (Galloway & Bodenham, 2004). However, polyurethane PICC are recommended because polyurethane is a tougher material, enabling thinner lumen walls and larger internal diameters of the lumina. This significantly increases flow rates and reduces the potential for breakage and rupture of the catheter (Hadaway, 1995; Mayer & Wong, 2002). This is an advantage because of the volume of blood and platelet infusions required by haematology patients.

Patient care prior to catheter insertion

The procedure, including risks and benefits, should be explained to the patient. The 'operator' should undertake a physical assessment, vein assessment and history of previous central venous catheterizations. Small, portable ultrasound imaging devices provide quick confirmation of vein patency. The presence of venous collaterals on the chest wall/abdomen may signify deep venous obstruction. A history, or signs of SVC obstruction is highly significant, as is a history of difficulties or failure of insertion by a competent operator using X-ray screening or ultrasound. If there is a history of a prior thrombus it is prudent to perform formal ultrasound imaging studies with Doppler measurements, on both the affected and unaffected side, to exclude thrombus and ensure vein patency. Ultrasound gives useful information at most sites but cannot image the SVC. Other modalities including conventional venography, CT with contrast, MRI venography and transoesophageal ultrasound all have advantages. Difficult, or potentially difficult cases should be discussed with a vascular radiologist. Stenting techniques can be used to restore patency to stenosed veins.

It is generally accepted that the platelet count should be >50 · 109/l prior to insertion of a catheter other than a PICC (BCSH, 2003), and the INR <1.5. (Ansell et al., 2004; Douketis, Johnson & Turpie, 2004) Problems may arise when patients are refractory to platelets, have idiopathic thrombocytopenic purpura (ITP) or thrombotic thrombocytopenic purpura (TTP), or in the presence of deranged clotting, for example, in acute promyelocytic leukaemia. The risks and benefits of insertion in terms of

type and site of catheter must be assessed on an individual basis. Where the risk of bleeding is increased, or when difficulties with insertion are anticipated, use of experienced personnel and ultrasound guidance are essential (Hatfield & Bodenham, 1999) to maximize the likelihood of an atraumatic, 'first pass' procedure. Additionally, use of lidocaine with adrenaline 1 : 200 000 as local anaesthetic will reduce subcutaneous bruising/bleeding. The increasing recognition of the risks associated with the use of blood products mandates assessment of need on an individual basis rather than routine correction of all minor abnormalities of platelet count and coagulation studies.

Antibiotic prophylaxis

In a meta-analysis of published research, the Center for Disease Control in the United States of America (O'Grady et al., 2002) identified that the use of antimicrobial prophylaxis routinely before insertion or during use of an intravascular catheter does not prevent catheter colonization or BSI (evidence level 1A; i.e. strongly supported by well-designed experimental, clinical, or epidemiologic studies). The Department of Health (Pratt et al., 2001) has issued guidelines limiting the use of vancomycin. They state that the agent should not be used in the following circumstances.

- As treatment in response to a single blood culture positive for coagulase-negative staphylococcus, if other blood cultures drawn in the same time frame are negative.
- For routine prophylaxis.
- When there is a catheter-related infection involving beta-lactam-sensitive organisms.
- As continued empiric therapy for presumed infections in patients whose cultures are negative for beta-lactam-resistant gram-positive organisms.

Antibiotic cover may be appropriate if simultaneous insertion and removal procedures have to be performed in a known case of catheter-related sepsis. However, it is not routinely recommended.

Catheter insertion

As previously mentioned, it is essential that only experienced personnel insert central venous catheters, to minimize infection and other complications, particularly in the presence of low platelets, deranged clotting and/or in the critically ill patient. This includes the short-term multiple lumina nontunnelled catheter, which is often inserted by junior

medical personnel who have undergone minimal training with little clinical supervision in insertion techniques.

Immediate patient care after catheter insertion

Tip placement should be checked by X-ray prior to use and the position of the catheter tip documented in the patient file. Optimum tip position is the distal superior vena cava or the upper right atrium (Fletcher & Bodenham, 2000).The carina can be used as an approximate marker of the level of the pericardial reflection. Catheters inserted from the left side tend to need the tip to lie at the junction of the SVC and RA or within the upper RA, in order for the catheter tip to lie within the long axis of the vessel. Changes in tip position on standing may be significant. Chest X-rays taken within 1–2 h of placement may not demonstrate a slowly developing pneumothorax or bleed. A further chest X-ray is required if the patient becomes dyspnoeic or complains of laterat chest wall discomfort/pain. Pneumothorax usually relates to subclavian vein catheterization but can also result from attempted internal jugular cannulation. Many pneumothoraces do not require drainage but should be monitored by serial X-rays. Smaller bore Seldingertype drains are suitable for draining slowly accumulating collections when treatment is required, and large bore traditional chest drains are rarely required.

A transparent semi-occlusive dressing such as Op- Site 1 V 3000TM is recommended (Reynolds, Tebbs & Elliott, 1997; Treston-Aurand et al., 1997). Transparent dressings reliably secure the device, permit continuous visual inspection of the catheter site, permit patients to bathe and shower without saturating the dressing, and require less frequent changes than do standard gauze and tape dressings. The dressing should be changed after the procedure if bleeding has occurred, but otherwise not until 24 h postoperatively. It should then be changed weekly if there are no signs of bleeding and/or infection. However, a recent review has found no consistent benefit for any type of dressing (Gillies et al., 2003). A meta-analysis has assessed studies that compared the risk for catheterrelated BSIs for groups using transparent dressings vs. groups using gauze dressing. The risk for CRBSIs did not differ between the groups. The choice of dressing can be a matter of preference. If blood is oozing from the catheter insertion site, gauze dressing might be preferred (O'Grady et al., 2002).

For patients with a tunnelled catheter, the upper suture over the insertion site into the vein should be removed at 7–10 days and the lower one at the

exit point should be removed after 3 weeks. Recent evidence supports the use of securing devices, including tapes, adhesives or staples (Motonaga, Lee & Kirsch, 2004), particularly with nontunnelled CVCs and PICC. These obviate the need for sutures at the exit site or around the vein, which can cause difficulties with subsequent line removal. Securing devices have also been shown to reduce infection rates when compared with sutures (Crnich & Maki, 2002; Yamamoto et al., 2002; Frey & Schears, 2006). Sutures over an implanted port insertion site are removed after 7–10 days, although some operators may use dissolvable sutures to close the wound. Peripherally inserted central catheters and nontunnelled catheters should always be covered with a dressing, although skin-tunnelled catheters may not require a dressing once the wound has healed (Morris et al., 1995; O'Grady et al., 2002). This can be reviewed on an individual basis. Implanted ports do not require any dressing once the wound has healed.

Long-term catheter care

For skin-tunnelled devices, it is advisable to either secure the ends to the chest wall with tape or to use a 'neck-bag' to take the weight of the free ends. Showering is preferable to bathing, and swimming must be avoided with any external catheter, in order to prevent colonization by Gram-negative organisms, especially Pseudomonas spp.

Flushing with the correct solution and technique is essential to maintain catheter patency, and only single-dose solutions should be used. The use of heparin flushes vs. normal saline intermittent flushes remains controversial. Many clinicians still recommend the use of heparin (10 U/ml) to prevent thrombus formation and ensure catheter patency, but the efficacy of this is unproven (Pellowe et al. 2004). Exposure to heparin should be minimized to prevent the development of heparin-induced thrombocytopenia (HITS) and to avoid development of bleeding complications because of inadvertent heparinization secondary to multiple heparin flushes (Passannante & Macik, 1998). A review of the current evidence concluded that heparin doses of 10 U/ml are no more beneficial than flushing with normal saline alone (Pellowe et al. 2004). However, there are exceptions. For example, apheresis/ dialysis catheters require heparin flushes to maintain patency, and some manufacturers and clinicians recommend heparin flushes, particularly when catheters are infrequently accessed. The need for heparin may be a function of bore, as larger bore catheters allow quicker back-tracking of blood up the lumen. Because thrombi and fibrin deposits on catheters might serve as a nidus

for microbial colonization of intravascular catheters, the use of anticoagulants might have a role in the prevention of CRBSI. Because the majority of heparin solutions contain preservatives with antimicrobial activity, whether any decrease in the rate of CRBSI is a result of the reduced thrombus formation, the preservative, or both is unclear (O'Grady et al 2002).

Patient information

A patient's guide should include the following sections: (i) What constitutes a central venous access device. (ii) The advantages and disadvantages of having a central venous access device. (iii) Any risks involved in the insertion of a central venous access device. (iv) Care of the device. (v) Removal of the device.

Locally generated patient information leaflets are recommended but should not be a substitute for careful and detailed explanation by a nurse/doctor experienced in the care of central venous catheters. Generally speaking, the following information must be provided, with a 24-h cover arrangement:

Management of problem patients

- If the patient is thrombocytopenic and there is evidence of bleeding after catheter insertion, then the patient should receive further platelet transfusion(s) to maintain the count in excess of 50 · 109/1 until bleeding stops, bearing in mind problems may exist in patients refractory to random donor platelets or in those suffering from ITP or TTP (BCSH, 2003). In these situations the application of pressure dressings and topical tranexamic acid may help. Prolonged compression (15 min plus) will often stop bleeding. It should not be overlooked, however, that there are no published prospective, randomized studies to support or negate the theory that the level of platelet count at time of CVC insertion should be maintained above 50 · 109/l to reduce potential for significant bleeding problems. Barrera et al. (1996) concluded that thrombocytopenia is not the only risk factor for bleeding and concludes that other variables such as insertion site, number of needle passes to cannulate the vein, and expertise are more pertinent. Similarly, the study by Ray and Shenoy (1997) concluded that peri-procedural platelet transfusions have little effect on bleeding outcome. Other studies in patients with liver disease and complex haemostatic defects have found that a platelet count of <50 ·109/l was an independent risk factor for bleeding in comparison with raised INR or

prolonged PT (Doerfler, Kaufman & Goldenberg, 1996; Fisher & Mutimer, 1999; Mumtaz et al., 2000). Robust, randomized studies are necessary to achieve evidence-base guidance in these complex situations.

- In patients with disseminated intravascular coagulation, for example, in association with acute promyelocytic leukaemia, there should be vigorous correction of any abnormality of coagulation. The prothrombin time should be <1.5 times normal and fibrinogen >1.0 g/1. Patients taking oral anticoagulants should stop their tablets to achieve an INR <1.5 before catheter insertion. If time is limited, factor concentrates, fresh frozen plasma (FFP), or vitamin K may be required, but the latter, in high doses, may interfere with subsequent anticoagulation (Baglin, Keeling & Watson, 2005). Reversal of therapeutic anticoagulation with vitamin K is usually achieved within 4–6 h of intravenous administration of vita-min K, and within 24 h of oral administration (Watson et al., 2001). Phytomenadione (Konakion) doses of up to 2 mg intravenously, or 5 mg orally are recommended. Complete and rapid reversal of over anticoagulation is more readily achieved with a factor concentrate rather than with FFP (Makris et al., 1997; Evans, Luddington & Baglin, 2001). Intravenous vitamin K should be given if reversal is to be sustained (Yasaka et al., 2002), and repeat administration may be required after 24 h. Intravenous unfractionated heparin (UFH) should be stopped 3 h before catheter insertion and restarted when haemostasis is secured. In patients receiving prophylactic subcutaneous low molecular weight heparin (LMWH), catheter insertion can be undertaken 12 h after the last injection; for patients receiving therapeutic subcutaneous LMWH, the time to catheter insertion should be extended to 18 h after the last injection. Heparin can be recommenced once the operator has confirmed haemostasis is secure, usually within 2 h of catheter insertion. Substitution with intravenously infused UFH or insertion of an IVC filter should be considered if there is a very high thrombotic risk. Expert haematology advice should be sought.
- Haemophiliac patients (with haemophilia A, B or C) will require appropriate factor replacement, as may patients with other inherited coagulopathies. Correction should be maintained for >48 h. Clinicians caring for such patients should seek advice from their local haemophilia reference centre.
- Infection at the time of catheter insertion represents a relative contra-indication to proceeding, and consideration should be given to temporary, nontunnelled catheter placement or temporary use of peripheral cannulae, but the risks and benefits should be considered for each patient on an individual basis. If the patient has a unilateral skin infection on the anterior

upper chest wall, the unaffected side should be used for catheter placement. Targeted antibiotic prophylaxis may be warranted in these cases.

Routine replacement of nontunnelled CVCs should not be used as a method for preventing catheter-related infection, as this has not been shown to reduce infection rates (Cook et al., 1997; O'Grady et al., 2002). Guidewire-assisted catheter exchange to replace a malfunctioning catheter is acceptable if there is no evidence of infection. However, if infection is suspected, the existing catheter should be removed and a new catheter inserted at a different site (Pratt et al., 2001). This technique is generally impractical for cuffed tunnelled catheters or ports, when it may be technically easier and safer to insert a new catheter into a clean site.

- A patient who has received previous radiotherapy to one side of the chest should have the catheter inserted on the opposite side. Patients who have undergone mastectomy and lymph node dissection should have the catheter placed on the opposite side. Catheters can be tunnelled onto the arm or other sites if the chest wall is unsuitable. Catheters should be kept away from breast prostheses and pacemaker boxes/wires.

Prevention and management of catheter complications

The main complications are: (i) catheter-related infection; (ii) catheter malfunction; and (iii) catheter-related thrombosis.

Catheter-related infection

Infection rates vary from 0.08 per 1000 days in oncology outpatients to 19/1000 catheter days in the critically ill (Fletcher, 2005). Haemato-oncology infection rates probably lie somewhere within this range but catheter-related blood stream infections can be severe and life-threatening depending on the micro-organism involved. The Department of Health (Pratt et al., 2001) has made recommendations for good practice regarding prevention, diagnosis and treatment of infections (and other aspects of central venous catheterization), which have recently been updated by Pellowe et al. (2004). There are three categories:

- A catheter-related blood stream infection is defined as at least two blood cultures positive with the same organism, obtained from at least two separate sites at different times, in association with evidence of colonization of the catheter with the same organism. The latter part of the definition can only be strictly fulfilled by removing the catheter.

- An exit site infection presents with erythema, tenderness and occasionally a discharge at the insertion site.
- A tunnel infection is characterized by pain and induration along the track of the catheter.

  The incidence of these infections varies in different centres with different groups of patients and different practices.

Catheter malfunction

Partial and complete catheter blockage is evidenced by difficulty in aspirating blood or infusing fluid. Forcible introduction of fluid down an obstructed lumen may cause catheter rupture. Catheter occlusion may include blockage resulting from kinking of the catheter, 'pinch off syndrome', occlusion of the catheter tip on the vessel wall, fibrin sheath or fibrin flap or luminal thrombus, or migration of the tip into a smaller vessel. Plain X-ray or a catheter contrast study may be helpful in confirming the diagnosis. Initially, fibrin sheaths manifest with catheter dysfunction, progressing to complete failure. They are usually discovered 1–2 weeks after placement (Crain, Horton & Mewissen, 1998). Infusion substances can penetrate between the catheter wall and the fibrin sheath in a retrograde manner, along the catheter to the site of venous insertion, and even out to perivascular and subcutaneous layers. This can lead to cutaneous or subcutaneous necrosis. Untreated fibrin sheaths are associated with increased risk of complications, but interventional radiologists may be able to temporarily salvage catheter function by using percutaneous, intravascular fibrin sheath stripping via a transfemoral approach (Knutstad, Hager & Hauser, 2003).

Where catheter occlusion is due to thrombus without symptomatic thrombosis, instillation of Hepsal (heparin sodium 10 U/ml) may be effective. If not, urokinase 10 000 U/ml reconstituted in 4 ml normal saline may be tried, using 2 ml of solution into each catheter lumen and ensuring that intraluminal volumes only are instilled. Urokinase is manufactured by Medac and is available on a named patient basis. The solution should be injected gently into the catheter with a push-pull action to maximize mixing within the lumen. The lumen should then be clamped and left for at least 2–3 h. The catheter should then be unclamped and the solution containing disaggregated clot aspirated (Gabriel, 1999; Dougherty, 2004). It has not been shown to be cost-effective or clinically necessary to leave the solution in the lumen for longer periods, such as between episodes of haemodialysis.

Very recently, an alternative urokinase preparation called Syner-KINASE has become available. This is manufactured by Syner-med and has been licensed in the UK for clearing blocked intravenous catheters. It is highly purified, extracted from human urine, and tested by PCR to exclude viral contamination. This is said to be free of the technical problems associated with manufacture, which occurred with the previous brands of urokinase.

An alternative to urokinase is Cathflo Activase (Alteplase), which is a recombinant human tissue plasminogen activator (t-PA; Deicher et al., 2002). Again, this is available on a named patient basis and is manufactured by Genentech.

Other reasons for catheter malfunction can include damage to the catheter. For example, 'pinch off' as described earlier, or kinking of the catheter. Occasionally, the tip of the catheter can migrate, particularly if the catheter is short and the tip initially lies in the upper superior vena cava or brachiocephalic vein. This may result in the catheter ceasing to function. Repeat chest X-rays may help in diagnosing these problems. Internal repair of a damaged catheter is no longer recommended because of risk of infection and/or air embolus. External repairs of damaged catheters can be performed using kits provided by the manufacturers.

Catheter-related thrombosis

Catheter-associated thrombosis may be spontaneous, or may result from a prothrombotic state associated either with underlying malignancy or treatment, particularly with L-asparaginase, thalidomide or lenalidamide. The catheter will normally require removal if thrombosis is confirmed. Intraluminal thrombosis may be prevented by adhering to appropriate flushing protocols and ensuring good placement of the catheter tip (Table 2). The use of low dose warfarin is now contraindicated as it has been shown to be of no apparent benefit for the prophylaxis of symptomatic catheter-related thrombosis in patients with cancer (Couban et al., 2005; Young et al., 2005). Dose-adjusted warfarin may be superior but at the cost of an increased risk of bleeding. There are no published data concerning ideal levels of anticoagulation in thrombocytopenic patients or on the recommended duration of anticoagulant therapy in catheter-related thrombosis. If the catheter is removed because of confirmed thrombosis, therapeutic doses of low molecular weight heparin and warfarin should be given in nonthrombocytopenic patients. In thrombocytopenic patients low molecular weight heparin may be used, adjusting the dose in accordance with the level of thrombocytopenia. Full doses can be given if the platelet count exceeds 80 · 109/l (BCSH, 2006), in the absence of bleeding and

where renal function is normal. With platelet counts below this, the decision regarding heparin dose should be based on clinical need, the presence or absence of bleeding, and whether or not the platelet count increments with platelet transfusion. Renal function should be regularly monitored during treatment.

Anticoagulation should be continued for a period of approximately 3 months in uncomplicated cases, with a target INR of 2.5 (range: 2.0–3.0) when warfarin is being used. If there is clinical or radiological evidence of persistent thrombus, anticoagulation should be continued for a longer period. Mechanical clot lysis or local application of thrombolytic drugs to rapidly restore vein patency can be effective if the vein is occluded with fresh thrombus. Collaboration with vascular surgical or interventional radiology teams is advised.

If the patient has a PICC, any swelling of the arm should be monitored. Swelling alone does not confirm thrombosis, and if suspected it must be confirmed radiologically, by Doppler ultrasound, CT scanning or other imaging. If confirmed, the PICC should be removed and anticoagulants commenced as described previously.

Technique of catheter removal

Indications for catheter removal include :

(i) catheter - related infection, (ii) persistent catheter occlusion (iii) catheter-related thrombus, (iv) damaged catheter, and (v) the end of treatment.

- The catheter should be inspected carefully after removal to ensure that it is complete, and, if infection is suspected, the tip should be sent to the microbiology department for culture.

Recommendations for audit

- A locally based audit should include patient indentification data, diagnosis, date of catheter insertion, number of previous catheters, operator and department where the catheter was inserted, complications associated with the catheter, date of and reason for removal.
- Each unit should monitor their infection rates/1000 catheter days to observe any changes or trends in infection rates and be mindful of the emergence of resistant bacteria.

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