GEETANJALI UNIVERSITY

SPANDAN

Quarterly Medical Bulletin

Vol. 4 Issue 3 | e-mail : editorbulletin@geetanjaliuniversity.com | April - June 2016

HIGHLIGHTS

THE PLACEBO EFFECT: PATIENT, HEAL THYSELF

Dr. D.M. Mathur

There's a drug that can make you run faster, feel less depressed and experience reduced pain. Don't believe me? You shouldn't. That's because this miracle drug isn't a drug at all — it's a placebo.

The word 'placebo', Latin for "I will please", dates back to a Latin translation of the Bible. Though placebo effects have been around as long as people have been selling snake oil. Philosopher Michel de Montaigne is credited as being one of the first to describe the phenomenon, when in 1572 he wrote: "There are men on whom the mere sight of medicine is operative."

It earned its place in the medical literature when T.C. Graves described "the placebo effect" in a paper published in The Lancet in 1920. Forty years later, the effect was embraced officially when placebo-controlled clinical trials became popular. The "placebo effect" or an inert substance's ability to improve a patient's symptoms has been documented in everything from pain due tooth extractions to irritable bowel syndrome (IBS) to Parkinson's disease to bipolar disorder.

Popular medical opinion held that the effect was primarily illegitimate reactions made by "suggestible and neurotic" patients. In 1978, scientists at the University of California administered placebo saline injections to patients recovering from oral surgery. The majority of patients reported symptom relief, until researcher Jon Levine injected the patients with naloxone, a drug that blocks the effects of endorphins in the brain. The patients' pain returned. This was the first evidence of biochemical pathways behind the placebo effect.

Using fMRI and PET scans, researchers revealed that some of the brain's neurotransmitters, endorphins, dopamine and cannabinoids, are involved in the placebo effect. In other words, mere suggestion can set off an elaborate dance of neurochemicals. Specific areas in our brain appear to be activated by the placebo response, says Ted Kaptchuk, the director of Harvard University's program of placebo studies. These areas include the prefrontal cortex, involved in planning and expectation, and the anterior cingulate gyrus, which

(among other things) monitors blood pressure and heart rate. Emerging evidence suggests that there is a dopamine-regulating gene that might make ...

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ANNOUNCEMENT

Dr.Kishor Pujari

Dr. Kishor Pujari has joined as **Chief Executive Officer-Geetanjali University, Udaipur.** He comes with 16 years of rich diversified experience in health industry in India and overseas. He started his career as HOD –Blood Bank with KEM hospital, Pune, While continuing his career progression, he played vital role in various premier healthcare organization like Apollo Hospitals Group as National Head-medical Services ,BU Head-Apollo Project in Tanzania , Kamalnayan Bajaj Hospital (Bajaj Group) as Facility Head and Medical Director, Aditya Birla Memorial Hospital Pune as Medical Superintendent . His last assignment was with Pacific International hospital as a CEO & Medical Director in Port moresby,Papua New Guinea.

Dr. Pujari has done his **MBBS** from Govt Medical College , Miraj, **MHSM**(Master of Health Services Management)from UTS Australia, MPM-Master of Personnel (HR) Management from Pune University ,and **PGDHM** from Pune.

Heartfelt Welcome !

email : kishor.pujari@geetanjaliuniversity.com

Desk of the Dean

SPANDAN issue of second quarter of year 2016 speaks volume of achievement and researches carried out in the period of April ,May & June 2016.Advances made by the department of Cardiology have been spoken aloud by the faculty as well as beneficiaries . Geetanjali Hospital is getting uncommon Clinical Conditions, that are being treated & reported by several departments. Reporting the successful management of rare cases not only highlights the quality of care at GMCH but also encourages every other to continue their efforts .Congratulations to the faculty , keep it on...everyone

A CASE OF NEUROFIBROMATOSIS TYPE 1

Dr. Devendra Sareen, Dr. Neetu Beniwal, Dr. Rajiv Gurjar Department Of Pediatrics - GMCH

Dr Devendra Sareen

INTRODUCTION

Neurofibromatosis (NF) is an autosomal dominant disorder that causes neoplastic growth on nerves and results in other abnormalities such as skin changes and bone deformities. There are 2 types of neurofibromatosis (Type 1-NF1,Type2-NF2). Neurofibromatosis type 1 is the most common type with an incidence of 1 in 3000 live births and is characterized by multiple cafe-au-lait spots.

CASE REPORT

A 12 yr old female, student of class 8, resident of Udaipur was brought to the paediatrics OPD with the complaints of multiple hyperpigmented skin macules. Since the age of 7 years many cutaneous swellings appeared which gradually increased in size all over body, particularly on the left eyelid resulting in visual difficulty. There is no history suggestive of consanguinity, trauma to the eye & any significant illness in the past or in the family.

PHYSICAL EXAMINATION

Dermatological: Approximately 20 soft cutaneous neurofibromas,the largest amount on the chest, abdomen & back. Size ranging from a few millimeter to several centimeters in diameter. Multiple cafe-au-lait spots with diameter > 15 cm (Figure 1).

Ophthalmological: A 5 cm fibroma that affected the edge of eyelid and spread approximately 1 cm to the eyelid margin on the lateral part of upper eyelid of the left eye (Figure 2). The upper eyelid had partial secondary ptosis. Lisch's nodules were seen. Visual acuity was within normal limits.

Systemic examination revealed no significant abnormality.

Investigations-

Routine hematological, biochemical investigations, including urine examination was within normal limits.

Ultrasonography of the left eye revealed possibility of plexiform neurofibroma.

A diagnosis of neurofibromatosis type 1 was made.

DISCUSSION:

Figure 1

Manifestations of neurofibromatosis observed for a long time before being described by Robert William Smith in 1849. The classic description is by a German pathologist, Friedrich Daniel von Recklinghausen, who accurately described the diverse findings as a single entity in 1882; thus the condition is often referred to as von Recklinghausen's disease. There is no single commonly accepted classification. According to the most widely accepted classification, there are four recognized forms of neurofibromatosis: von Recklinghausen's neurofibromatosis (or neurofibromatosis type 1 [NF-1] or peripheral neurofibromatosis) Bilateral acoustic neurofibromatosis (or neurofibromatosis type 2 [NF-2] or central neurofibromatosis) Segmental neurofibromatosis Cutaneous neurofibromatosis Riccardi3 suggested the presence of three additional forms: type 3 (mixed), type 4 (variant) and type 5 (late-onset).The neurofibromatosis comprise of at least two separate genetic disorders (NF-1 and NF-2) characterized by the formation of tumours surrounding nerves and a variety of other pathological features. As many as six additional types have been proposed to characterize what appear to be clinically distinct conditions within this group.

The most common type (NF-1) accounting for 90% of cases, is characterized by multiple cafe-au-lait spots and the occurrence of neurofibromas along peripheral nerves. Cutaneous neurofibromas are soft, flesh- or lilac-pink coloured tumours, sessile or dome-shaped, sometimes pedunculated, and most numerous on the trunk and limbs.Other clinical features include Lisch's nodules (melanocytic pigmented iris hamartomas) and oral lesions. Possible complications in childhood include the development of an optic glioma, endocrine disturbances and involvement of the lower urinary tract. The children

Editorial

The **SPANDAN** issue in your hand presents the success story of Geetanjali cardiac center 'Dil se Dil tak'.It highlights interesting and rare cases of Cardiology, Neurovascular Intervention Radiology ,Paediatrics, Ophthalmology and Pharmacy. Very rare and thought provoking material is provided in articles on "placebo effect of healing" ,and "love from neuroendocrine and socio biological perspective". Expansion of services in our hospital for quality improvement for patient care speak of the commitment of Geetanjali trust. Glimpses of programe and activities from different institute of GU would encourage institutes ,faculty and students.

Editor-in-Chief

may also present with learning disabilities.

Von Recklinghausen's neurofibromatosis (NF-1) is inherited in an autosomal-dominant fashion and has a prevalence of between 1 per 3000 and 1 per 5000 live births thus being one of the most common autosomal-dominant conditions in humans. The penetrance of NF-1, or the proportion of people with the NF1 gene with a clinical presentation of the disorder, is close to 100% but because the mutation rate is so high, about a half of the newly diagnosed cases may represent with new mutations. The gene has been isolated to the proximal long arm of chromosome 17.

Diagnostic Criteria :

According to the National Institute of Health Consensus Development Conference, at least two of the following criteria must be present to make the diagnosis of NF-1:

1. Five or more cafe-au-lait spots larger than 5 mm in diameter in prepubertal patients; six or more cafe-au-lait spots larger than 15 mm in diameter in postpubertal patients
2. Two or more neurofibromas of any type, or one plexiform neurofibroma
3. Axillary or inguinal freckling
4. Optic glioma
5. Two or more Lisch's nodules
6. A distinctive osseous lesion (pseudoarthrosis of the tibia or sphenoid wing dysplasia)
7. A first-degree relative diagnosed with NF-1 in accordance with the above criteria Plexiform neurofibromas of the orbit tend to originate from the orbital branches of the trigeminal nerve. They often affect the upper eyelid, causing a characteristic sinusoidal deformity of the lid margin. The tumor is soft and feels like a “bag of worms”; the resultant displacement of the globe or ptosis can result in amblyopia in children. Plexiform neuromas of the orbit are associated with congenital absence of the sphenoid or enlargement of the sella turcica.

Figure 2

CONCLUSION

The patient described here is a typical case of NF-1, which presents a considerable interest because of the high generalization of the skin lesion. In such cases, a detailed patient investigation is required, because of the possibility for generalized involvement of other organs. The proper clinical and genealogic analysis is important for the determination of the genetic risk and prognosis for the relatives of the proband. The treatment of such kind of patient is surgical, seeking to achieve cosmetic improvement, and may be only palliative.

INTERESTING CASE OF ANGIOPLASTY IN VARIANT TOKAYASU'S ARTERITIS

Dr. C P Purohit, Dr. H Sanadhya , Dr R Patel, Department of Cardiology-GMCH

Dr. C.P. Purohit

Takayasu's Arteritis was named after its first identifier Japanese ophthalmologist and because of its predilection for brachiocephalic vessels, it is also labeled as Pulseless disease and Aortic arch Syndrome. The classic form described is commonly found in Japan but in India Thoracoabdominal involvement is more common. Etiology is Unknown. Histologic exmination discloses a granulomatous arteritis and in later stages due to medial degeneration , fibrous scarring , intimal proliferation and thrombosis results in narrowing of vessel. Aneurysm formation is less common but aneurysm rupture is common cause of death.

Angiographically, Left Subclavian Artery is involved in 90 % thoracic aorta in 66 % and Abdominal Aorta in 50 % of cases. Usual presentation is Female in her second or third decade. During early phase patient present with fever, malaise, weight loss, raised ESR, CRP and in later stages present with claudication of limb, TIA, Syncope, Hypertension . Cardiac manifestation results from Hypertension , aortic obstruction & , coronary artery stenosis. Takayasu's Arterits is usually treated with corticosteroids and immunosuppressive drugs. Percutaneous angioplasty and stenting are associated with favourable results in patient with obstructive symptoms.

This patient 12 year Female came to us with history of dyspnea gradually increasing for last one year and now NYHA(New York Heart Association)class III with puffiness of face and weakness of lower limbs.

Figure 1
100% Occluded
Aorta infarenal

Figure 2
After Angioplasty
of Aorta and SMA

On examination there was radiofemoral delay and Systolic Blood pressue difference of 100 mmHg between two limbs. Upper limb showing BP of 200/90. On echocardiopgraphy LV was dilated with severe LV systolic dysfunction , EF of only 23 %. There was no Coarctation of aorta . patient was advised to undergo angioraphy of thoracoabdominal aorta to delineate disease. On angiography , Aorta was 100 % occluded infrarenally with distal reformation by collaterals just before bifurcation. Along with it proximal Superior Mesentric Artery was 90 % occluded. Looking at her condition it was planned to revascularize occluded the aorta.Both right femoral artery and left brachial artery approach were adopted. First retrograde was attempted but wire was entering into false lumen hence anterograde approach was taken ,with it wire was crossed through lesion and was exteriorised from Right fermoral artery proving its presence in true lumen. Through this wire lesion was sequentially ballooned and 8*60 mm perpheral stent was deployed. Pressure gradient dropped significantly. After this SMA lesion was also crossed

with wire and a 5 * 15 mm stent was deployed.

Patient was discharged in stable condition on Antiplatelets, Antiproliferative drugs, ACE inhibitor, Beta blockers and diuretics. Patient is following in OPD regularly and her symptoms improved.

In conclusion , in current era peripheral vascular disease are easily manageable by percutaneous methods and are of first choice.

LOVE: FROM A NEURO-ENDOCRINE AND SOCIO-BIOLOGICAL PERSPECTIVE

Dr. Manu Sharma, Assistant Professor, Department of Psychiatry - GMCH

Dr. Manu Sharma

Falling in love is, in some ways, indistinguishable from a severe pathology. That's an unpalatable truth. Relax and indulge me with a pinch of salt unless your blood pressure is high with seriousness. All of us feel the need to be loved and to love. When I talk about love, I am talking about love as a state. It is unaddressed: you don't love this person or that person, you simply love. Biochemically speaking, passionate love resembles addiction to cocaine or heroin, and behavior changes resemble psychosis.

Using functional Magnetic Resonance Imaging (fMRI), researchers have shown that the same areas of the brain are active when abusing drugs and when in love. The prefrontal cortex, an evolutionarily newer and complex area of the brain- hyperactive in depressed patients-is inactive when we are infatuated. Basically, a part of our brain switches off when we fall in love! Perception is distorted as is cognition. So much for "Love is blind" and the lover easily fails the reality test. Falling in love involves the enhanced secretion of b-Phenylethylamine (PEA, or the "love chemical") in the first 2 to 3 years of the relationship. PEA creates a euphoric high and helps obscure the failings and shortcomings of the potential mate. Such oblivion- perceiving only the spouse's good sides while discarding her bad ones - this is what a psychiatrist would call "splitting". Talking of shortcomings, I apologizefor deviating a bit here. I am tempted to say, women are illogical and irrational. Relax, beforeyou start judging me, I'm a feminist and I've learnt that you should never try to understand a woman (an exercise in futility), simply love her !

Other fMRI studies have shown the caudate nucleus and the ventral tegmental brain areas involved in cravings (e.g., for food) and the secretion of dopamine, are lit up in subjects who view photos of their loved ones. Dopamine is a neurotransmitter that affects pleasure and motivation, causing a sensation similar to a substance induced high. As distinct from love, lust is brought on by surges of sex hormones, such as testosterone and estrogen, which induce an indiscriminate (not necessarily negative) scramble for physical gratification. Dopamine, heavily secreted while falling in love, triggers the production of testosterone and sexual attraction then kicks in. Testosterone levels shoot up by 30% even during a casual chat with a female stranger. Stronger the hormonal reactions, more marked are the changes in behavior. This loop may be part of a larger "mating response" and nature's way to help bonding. Single males still "playing the field" have higher hormonal levels than married men or fathers. Research has shown that love-struck adolescents slept less; acted more compulsively, had "lots of ideas and creative energy", and were more likely to engage in risky behavior, such as reckless driving.

The brain reacts in identical ways when mothers look at their babies and when people look at their lovers. Hence it would be reasonable to conclude, both romantic and maternal love are highly rewarding experiences that are linked to the perpetuation of the species and consequently have a closely linked biological function of crucial evolutionary importance.

In all its facets and avatars, love, is an addiction, probably to the configurations of internally secreted amphetamine like PEA. Love, in other words (in a lighter vein, of course), is a form of substance abuse. The withdrawal of romantic love (“break-ups”) often leads to depression and anxiety which may have serious mental health repercussions. MRI-based studies have demonstrated how the insular cortex, an area of the brain in charge of experiencing pain, became active when subjects viewed photos of former loved ones.

It is certainly true that love cannot be reduced to its electrical and biochemical components. Love is not tantamount to our bodily processes, rather, it is the way we experience them. Love is how we interpret these streams and ebbs of compounds using a higher-level language. In other words, love is pure poetry! Truly, love is the process of alchemical change in your consciousness.

“ Medicine is a science of uncertainty and an art of probability ”

- William Osler

SURGICAL CORRECTION OF STRABISMUS

Dr. Sharda Punjabi, Assistant Professor, Department of Ophthalmology - GMCH

Dr. Sharda Panjabi

A 25 year old male presented to us with chief complaint of inward deviation of right eye since childhood. For this, he consulted many ophthalmologists in Udaipur and adjoining areas. Due to this problem he was facing professional and personal problems.

On ocular examination, unaided visual acuity was 6/12 and 6/6, right and left eye respectively. Best corrected visual acuity was 6/9 and 6/6, right and left eye respectively. Anterior and posterior segment were found to be within normal limit.

On orthoptic evaluation, patient was having alternate convergent squint with left eye dominance. Squint measurement was done with prism bar which revealed esotropia of 45 Prism Diopter for distance and 48 Prism Diopter for near. There was no significant A-V phenomenon. Extra ocular muscle movements of both eyes were in full range. Binocularity assessment with Synaptophore was done which showed only Grade 1 binocularity i.e. Simultaneous macular perception and central macular fixation was present.

After thorough evaluation patient was diagnosed having "Deep Alternate Convergent Squint with left eye dominance". The patient was advised to undergo squint correction i.e. Bilateral Medial Rectus Recession (which is treatment of choice for this condition). But the problem aroused when the patient refused to undergo a "Bilateral" procedure. He wanted only right eye to be operated. After counselling the patient and telling him all the risk involved (including residual squint), we planned to go for a unilateral correction (right eye only). Now instead for bilateral medical rectus recession, we planned for only Right Eye Lateral rectus resection of 7mm with Right Eye Medial rectus recession of 6mm under local anaesthesia.

Patient underwent the surgery on Right eye, and post op day 1 there was 50of residual esotropia. Follow up was done after 1 week and after 1 month. At the end of one month, the best corrected visual acuity was 6/9 and 6/6 in right and left eye respectively without any diplopia, and there was no residual esotropia and the patient was highly satisfied.

From this case we conclude that, in case of squint correction, the following points are important:

- Good pre-operative squint assessment
- Good muscle handling which will reduce chances of scarring and in turn will lead to good correction

PRE OP

DAY1 POST OP

1 MONTH POST OP

METHODS TO DISCOVER NEW ANTIBACTERIAL TARGETS : AN OVERVIEW

Mr. Neeraj Kumar, Assistant Professor, Department of Pharmaceutical Chemistry, Geetanjali Institute of Pharmacy - G.U.

Mr. Neeraj Kumar

The development of resistance to all current antibiotics in the clinic means there is an urgent unmet need for novel antibacterial agents with new modes of action. One of the best ways of finding these is to identify new essential bacterial enzymes to target. Antibacterial drug discovery programmes can either find new ways to inhibit old 'classical' targets or identify new 'druggable' targets. There are various cheminformatic approaches are used for target identification, pharmacophore mapping and 3D- QSAR techniques with special emphasis on antibacterial research.

Reverse docking using potential drug target database- The potential drug target database (PDTD) is a dual-function web- accessible database that searches the probable binding of proteins for new active molecular entity by using reverse docking. This reverse docking is accompanied by integrated reverse docking server Tar-FisDock (Target Fishing Docking) combining with PDTD.

INVDOCK (Inverse Docking) is an another approach for the computer-automated rational identification of potential protein target and nucleic acid targets of drugs including prediction of toxicity due to off-target effects.

UniDrug target–target identification in pathogenic bacteria- The UniDrug-Target server is an alternative tool that identify bacterial pathogen-specific proteins as targets by combination of bacterial biological information and

computational methods. This server facilitates the prediction of drug targets for any pathogenic bacteria with annotated information. Drug target identification is accomplished by comparing the proteome sequences of pathogenic and non-pathogenic bacteria.

Target identification in phenotypic bacterial growth inhibitions screens-

The phenotypic bacterial screening is determine by the mode of action of any 'hit' compounds either it is target-specific active or have whole-cell toxicity. In silico prediction was used to explicate the mode of action of 'hit' compounds by data mining methods.

Structure-based classification of antibacterial Activity-

It is widely accepted that antibacterial agents have unique position in all chemical space. The Quantitative structure–activity relationship (QSAR)

techniques predict antibacterial activity within large libraries of compounds on the basis of structural and physicochemical parameters. Partition coefficient (ClogP) and inter- and intramolecular hydrogen bonding was found to be most significant parameters in screening databases for identify antibacterial compounds.

Support vector machine-based methods- Support Vector Machine (SVM)-based methods have been designed from amino acid sequence-derived properties of known antibacterial targets, implementing a group of features of physicochemical parameters which is directly calculated from primary protein sequence. SVM are organized learning models associated learning algorithms that recognize the patterns. A hidden Markov model, MEME/MAST (Multiple Em for Motif Elicitation/Motif Alignment and Search Tool) and a hybrid model distinguish known drug targets from putative non-drug targets at an accuracy of 84%.

Homology Modeling- Homology Modeling is an innovative approach and applied when crystal structure of bacterial protein is not available. Homology modeling involves four steps: fold assignment, sequence alignment, model building, and model refinement. There are various computer softwares are available to perform this process automatically, for example, SWISS-MODEL, Phyre2, and MOE are available to perform this technique. A number of groups have generated homology models to facilitate screening of ligands for development of new antibacterial targets. Homology modeling is useful when a protein sequence identity is greater than ~30% otherwise >50% is preferable, especially around the ligand binding site.

Pharmacophore Models- Pharmacophore models are used for identification of novel ligands that will bind to the same receptor. These models were developed by using CATALYST HypoGen.

THE PLACEBO EFFECT . . . (Continued from Page 1)

some of us more susceptible to the placebo response. That might mean that our placebo response is written into our DNA.

Your perspective on the world — if you see the cup half empty or half full — plays a role, too. Engaged, optimistic people are most likely to experience the placebo effect. People who are negative, angry, hostile are least likely to experience it. Children seem to have greater response than adults to placebos

Placebo responses vary within countries. Americans respond better than Europeans to sham pills, surgeries and acupuncture. Brazilians had the lowest placebo responses (7% healing rate), while Germans rank highest at 59% which is three times more than neighbors Denmark and the Netherlands.

Research suggests that for psychological reasons, some placebos are more effective than others. Large pills seem to work better than small pills, expensive placebos work better than less expensive ones, colored pills work better than white pills, an injection is more powerful than a pill, and sham surgery gives a stronger placebo effect than injections do. Even giving a person a choice between two fake options improves outcomes, according to a study published in the Annals of Behavioral Medicine.

The placebo effect is a bio-psycho-social phenomenon that can be attributable to different mechanisms, including expectation of clinical improvement. Belief is powerful medicine, even if the treatment itself is a sham. New research shows placebos can also benefit patients who do not have faith in them. This makes placebos such fascinating area of research. Though placebos are “fake”, the body's responses to them are not. And then there are the studies testing the use of placebo without deception. These “open label” placebos have worked on patients with IBS, depression and migraine — even when explicitly presented as “like a sugar pill.”

Doctors can harness the strength of the mind and the power of care when treating patients. Attitudes of doctors, their body language and behaviors, the length of the consultation, using a phrase like “I believe this will help you,” instead of “This might work,” makes a difference in treatment response, research shows.

The 200-year-long debate in the medical literature about the ethics of prescribing placebos in medical therapeutics needs to be re-examined in light of recent placebo research and improved understanding of the placebo effect as an integral part of the doctor-patient relationship. It has traditionally been assumed that deception is an indispensible component of successful placebo use. Newman points out the "placebo paradox", – it may be unethical to use a placebo, but also unethical "not to use something that heals". Therefore, placebos have been attacked because they are deceptive, and defended on the grounds that the deception is illusory or that the beneficent intentions of the physician justify the deception. However, a proper understanding of the placebo effect shows that deception need not an essential role in eliciting this powerful therapeutic modality; physicians can use non-deceptive means to promote a positive placebo response in their patients.

Link : http://nypost.com/2016/01/24/medical-mystrery-of-why-placebos-are-becoming-more-effective/

Contributed by : Dr. D.M. Mathur, Professor & Head, Department of Psychiatry

Laughter is the best medicine

Doctors can be frustrating sometimes ...
You wait a month-and-a-half for an appointment,
and he says,
“ I Wish You’d Come to me Sooner . ”

NEW JOINING

DR.Sitaram Barath

Dr Sitaram Barath MBBS MD FNVIR has joined as consultant Neuro and vascular interventional radiologist at Geetanjali Medical College and Hospital Udaipur Rajasthan.

He has done his MBBS and MD (Radiology) from Goa Medical College and fellowship in Neuro and vascular interventional radiology (FNVIR) from prestigious Kovai Medical Center and Hospital ,Coimbatore.

He is experienced and well versed in neurovascular procedures such as aneurysm coiling, stroke interventions, carotid or intracranial stenting as well as embolisation for fistula or AVM.

He is well versed with life saving embolisation procedures in bleeding from any source or cause as well as chemoembolisation of tumors. His area of specialty includes peripheral arterial diseases, aortic aneurysm, dissection or traumatic aortic injury and venous diseases such as varicose vein and deep vein thrombosis.

He believes in multidisciplinary approach and has a role and support for in almost all the clinical specialities or superspecialities with a commitment of 24 x 7 services.

Endovascular Management of May-Thurner Syndrome (Acute DVT)

Dr. Sitaram Barath, MD,FNVIR- Neuro and Vascular Interventional Radiologist-GMCH
Dr.N C Sharma MD-Head of Department-Radiology

BACKGROUND:

May-Thurner syndrome or iliac vein compression syndrome causes deep vein thrombosis (DVT) due to chronic compression of the left iliac vein against lumbar vertebra by the overlying right common iliac artery.

Until recently May-Thurner syndrome was treated with anticoagulation therapy. However, anticoagulation alone only prevents the propagation of thrombus. The clot burden and mechanical compression remains unattended. So there is a significant chance of recurrent deep vein thrombosis or post thrombotic syndrome or both in due course of time.

Endovascular management actively treats both the mechanical compression with stent placement and the thrombus burden by means of mechanical aspiration or chemical dissolution and has been suggested as the front-line treatment by many studies.

May and Thurner in 1957 postulated that the chronic pulsations and mechanical compression by the overriding right iliac artery leads to the accumulation of elastin and collagen, contributing to spur formation ultimately resulting in partial venous obstruction

Combination of mechanical alterations to the vessel wall and hypercoagulable states leads to deep vein thrombosis.

CASE REPORT :

A 43 years old female who underwent TAH+ BSO 3 weeks back elsewhere presented with swelling of the left thigh and leg for 4 days to emergency department of our hospital.

Physical examination revealed a swollen left thigh, circumference of which was 7 cm larger than the right one. The patient had no previous episodes of venous thrombosis. She was treated with expectant management elsewhere with no appreciable improvement. Venous Doppler ultrasonography revealed occluded left common iliac vein with thrombus involving

left common femoral vein up to popiteal vein.

Abdominal CT demonstrated normal arterial anatomy and compression of the left common iliac vein by the left common iliac artery with total

CLINICAL AND PROCEDURE IMAGES

Fig-A

Fig-B

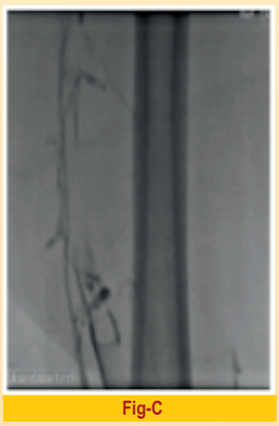

Fig-C

Fig-D

Fig A: Pre procedure swollen left leg. Fig B: Post procedure complete resolution of edema.

Fig C: Venogram showing acute thrombus in the femoral vein. Fig D: Occlusion of iliac vein

occlusion of the common iliac vein, along with thrombosis of external iliac vein which extended down to involve superficial femoral and popliteal veins. No pelvic mass was noted.

PROCEDURE:

A 9 F sheath was placed into left popliteal vein under USG guidance, venogram was done, and acute thrombosis of femoral and iliac vein was observed.

Mechanical aspiration of thrombus was done using 8f guiding catheter. Post suction venogram revealed occlusion of left common iliac vein with multiple paravertebral collaterals. The occluded segment was crossed using angled hydrophilic guidewire and dilated using 10 mm and 12 mm high pressure conquest balloon. Post plasty venogram showed residual signiofnact stenosis.

A 18 mm × 90-mm Wallstent (Boston Scientific, USA) was deployed across the occluded segment of the vein. The stent was dilated to 14 × 40 mm with the angioplasty balloon. A post-angioplasty venogram demonstrated a widely patent stent and good contrast material flow through the stent into the IVC, without filling of the cross-pelvic collaterals.

The patient was put on bridging heparin infusion and Tab Acitrom 3 mg OD and discharged from the hospital after 3 days. Patient had complete resolution of swelling on discharge.

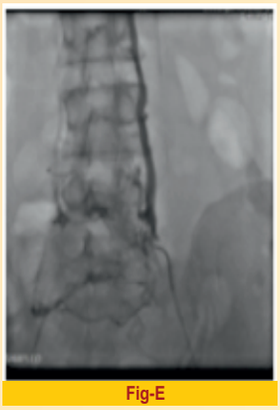
Fig-E

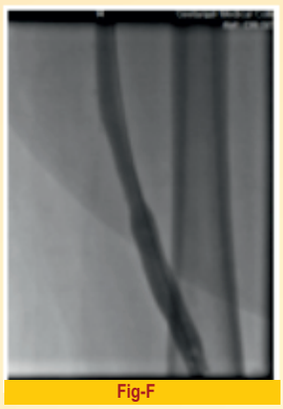
Fig-F


Fig-G

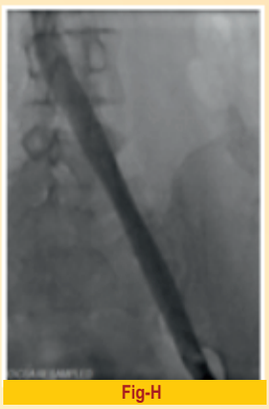
Fig-H

Fig E: Venogram showing multiple pelvic collaterals.

Fig F,G,H shows final result after thrombectomy, venoplasty and stenting.

CONCLUSION:

Acute deep vein thrombosis presenting within 14 days should be ideally treated by" endovascular catheter directed thrombosuction" or thrombolysis along with rectification of underlying anatomical cause especially in May-Thurner syndrome.

PHOTO QUIZ

A thirty five years old married female presented with removable white plaques over palate and buccal mucosa, painful areas in the mouth, changes in taste, sensitivity to spicy foods, decreased appetite, pain or difficulty in swallowing , persistent weight loss and chronic diarrhoea.

Q-1 What is your diagnosis for oral presentation ?

Q-2 What is the underlying condition?

(Answers elsewhere in this issue)

HORMONY 2016

Harmony 2016, the 8th Annual function of Geetanjali Medical College and Hospital, was conducted successfully from 4th-9th April, 2016; where the students from MBBS, BSc (Medical) and other streams of BSc, participated with full zeal and interest. Various activities in Sports, Literary and cultural events were conducted for the students.

The academic achievers were awarded with medals and cash prize, on the annual day celebrations by our Chairman, Sh. JP Agrawal .All rounder Mr. GMCH and Ms. GMCH, were selected based on the recommendation of an expert review committee and the title of Mr. GMCH was awarded to Mr. Pranay and Ms. GMCH to Ms. Parul Gupta

NATIONAL WORKSHOP AT GEETANJALI INSTITUTE OF PHARMACY

Indian Council of Medical Research(ICMR)sponsored national workshop on "Alternatives to animal experimentation: current status and challenges"was organized by Geetanjali institute of Pharmacy, Geetanjali University on 08th-09th January 2016. The workshop was a grand success. The delegates included Principals, senior Teachers and , research scholars and students of various institutes from all over India.

On first day ,the first part included the inaugural session, three scientific sessions, followed by the session of poster presentations. Second day five scientific sessions and final part included the valedictory session which marked the end of the academic event.

The workshop was inaugurated by dignitaries that included Shriashwani Kumar (ex-Drug controller general of India), prof. B. L. Tekwani(Principal scientist and Professor of pharmacology, school of pharmacy, university of mississippi,USA.) Dr.R.K. Nahar(Vice Chancellor, Geetanjali University), Dr. Ashok Dashora (Dean), Dr. Virendra Singh (Organizing secretary). Two days intensive interactive and very informative session pertaining to the theme of workshop were deliberated during varios seasons . Workshop concluded with the valedictory program wherein the best presenters were awarded. The feedback from delegates and resource persons rated the workshop to be a great success .The eminent speakers deliberated upon the ways to reduce and replace animals in experimentation through the use of alternative methods.

WORLD IMMUNISATION WEEK -2016

The Child Health Nursing department of Geetanjali School and College of Nursing organised the above week from 25th April 2016 with a variety of health related events.The theme of the week was **"Close the Immunisation gap-Immunisation for all throughout Life**" The programe was inaugurated by the dean of the College Dr.Jaya Lakhshmi Dr Devendra Sareen and Dr Arun Gupta HOD of Pediatrics and Obs. Gynae dept of GMCH. The Chairman of the Geetanjali group Shri J.P Agarwal highly appreciated the displayed exhibits and posters. principals of GCN and GSN Shri Yogendra puri Goswamy and Gajendra jain along with faculty member and students participated and contributed to the success of the programe.

ORTHOPADIC OPD RENOVATED

The Out Patient Orthopaedic deptt. of GMCH has been renovated to accommodate the increasing load of patients with better amenities and comfort. It was inaugurated by the chairman of Geetanjali group ,Shri J.P Agarwal on 25th april 2016.The Chairman congretulated the doctors of Orthopedic deptt over the issue.The ceremony was attended by Dean Dr F.S Mehta ,Prof & HOD Dr Harpreet Singh and Associate Prof Dr. R.A Saini ,Dr D.M Mathur Dr N .C Sharma Prof&HOD Psychiatry& Radiology respectively & other senior doctors and officials of H R and Marketing deptt.

ACCORD-2016

The annual week celebration of Geetanjali College of Physiotherapy – **The Accord 2016,** was celebrated with zeal and enthusiasm from 22nd April to 30th April 2016. Very attractive, mind blowing and heart pulsating cultural and literary events – dance, songs,one act plays, fancy dress, quiz, rangoli, salad making, events were performed on the stage and floor while competitions in cricket, basket ball, volley ball, TT, chess, badminton etc. were full of competition and thrill.

Shri J P Agarwal, Chairman Geetanjali Group was the chief guest in the concluding function while Shri Ankit Agarwal CEO, GU, Dr. F.S. Mehta Dean GMCH and Shri Bhupendra Mandliya, Registrar GU were the guests of honour . Meritorious performers in different events and academics were rewarded with momentoes and certificates by the chief guest and guests of honours. Priyanka Joshi, Deepika Balal, Darshana Mishra, Neha Solanki, Vidhi Gupta, Vivek Menaria, Vipin Shriman and Keerti Bhatnagar were the important awardees.

Prinicipal Dr Pallav Bhatnagar, other faculty members and student volunteers left no stone unturned to make **ACCORD – 2016** a memorable event.

"Inauguration of Expanded Neonatal ICU at Geetanjali Medical College & Hospital"

The Inauguration ceremony took place at Geetanjali Medical College & Hospital on Saturday, May 7,2016 of an expanded Neonatal ICU. It was officially inaugurated by Chairman – Geetanjali Group Shree J.P. Agarwal. The ceremony was also graced by Vice Chairman Geetanjali Group Kapil Agarwal and CEO – Geetanjali University Ankit Agarwal accompanied by special guests Principal-Geetanjali Medical College & Hospital Dr. F.S. Mehta, Medical Superintendent Dr G.L. Dad, Director Super-Specialty Dr. Dinesh Sharma and ICU In-charge Neonatologist Dr. Mahendra Jain.

The program was started with lightening of the lamp. Chief Guest of the function Shree J P Agarwal, in his speech said that, "Geetanjali Hospital's medical services & its expansion in quality care will provide better and quality services at par with national level with improvised & updated technologies."

On this occasion, Neonatal ICU In-charge Dr. Mahendra Jain also said that 15 bedded expanded Neonatal ICU is equipped with the latest equipments shall be helpful in treatment of premature babies weighing upto 900 grams or even 300 grams etc. premature babies. Also the set-up of aseptic ICU will prevent infection in babies.

Professor & Head, Dept of Pediatrics . Dr. Devendra Sareen also added that the serious diseases occurring among neonates shall get immediate treatment at Geetanjali Hospital with the availability of super specialty services & advance care.

Professor & Head, Dept of Obstetrics & Gynecology, Dr. Arun Gupta, Prof. Dr. Sharda Goyal, Dr. Sanjay Mandot and other doctors & staff members were present at the ceremony. The program was conducted by Rajeev Pandya GM (HR).

ANSWERS OF PHOTO QUIZ

1) Oral Candidiasis 2) HIV Infection

DR. RAHUL KUMAR SHARMA MD. (DERMATOLOGY ,VENEREOLOGY AND LEPROSY) ASSISTANT PROFESSOR IN DERMATOLOGY - GMCH

DIL SE DIL TAK

A very prestigious program by Geetanajli Cardiac Centre ,upon its 3rd anniversary was organized on 11th & 12th June 2016 under title 'Dil se Dil Tak'

The program was to commemorate the outstanding acheivment of 1100 cardiac surgeries among adults & children and 6000 interventional procedure in cardiology.

The celebration started with inauguration of second operation theatre for cardiac surgeries at Geetanjali hospital on 11th June 2016 at 9:00am by Dr Jagdish Prasad ,Director General Health Services, Ministry of Health & Welfare , Government of India . It was followed a very interesting '**Conclave**,a get-together of past patients and team of GMCH at Smt. Narmada Devi Agarwal auditorium, Geetanjali University. The **conclave** was blessed by Dr Jagdish Prasad ,the chief guest along with Shri J P Agarwal ,Chairman, Geetanjali group, Shri Kapil Agarwal, Vice Chairmen, Geetanjali group , Dr R.K Nahar Vice chancellor & Shri Ankit Agarwal CEO ,Geetanjali University Dr F S Mehta Dean GMCH & Dr G L Dad Medical Superintendent GMCH graced the occasion too.

— 3 साल —
1100
कार्डियक सर्जरी
(वयस्क, बच्चों सहित)
6000
इंटरवेंशनल प्रोसीजर
— का जश्न —
11-12 जून, 2016

GEETANJALI
Cardiac Centre

Chief guest congratulated and praised the efforts of the Chairman and the Geetanjali trust . The Chairman reiterated his conviction to develop the institute with more and more advanced most modern technologies and man power .

For almost three and a half hours the stage went with live performances of dance, songs and play by past patients , staff and students of cardiology center, Geetanjali Hospital .The Head of the department of Cardiology GMCH ,Dr C P Purohit & Dr Sanjay Gandhi ,Head Cardiac Surgery GMCH presented with achievements and future plan of Geetanjali Cardiac Centre .

On 12th June 2016 early morning,The Fatehsagar Pal observed hundreds of people along with Geetanjali trust members and cardiologist along with their family members and cardiac students walking with massages of **SAFE HEART FOR SAFE LIFE**.

GMCH
HEALTH IS HAPPINESS
दिल से दिल तक
11-12 जून, 2016

GEETANJALI UNIVERSITY

(Established by Government of Rajasthan ; U/S 2 (f) of the UGC Act 1956)

GEETANJALI UNIVERSITY

PRACTICAL EXPOSURE AT ITS OWN MULTI SUPER SPECIALITY HOSPITAL

EXCELLENCE IS OUR TRADITION

LABS WITH LATEST & ULTRA MODERN EQUIPMENT

QUALITY EDUCATION BY RENOWNED FACULTY MEMBERS

LISTEN TO MEDICAL EXPERT AT MOST HIGH-TECH AUDITORIUM

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- MD / MS (Clinical)
- Diploma in Clinical Pathology
- M.Sc. (Medical)
- Master in Hospital Administration (MHA)
- M.Sc. (Clinical Psychology)
- M.Sc. (Perfusion Technology)
- B.Sc. (Medical)
- B.Sc. (Medical Lab Technician)
- B.Sc. (Cardiac Perfusion)

B.Sc. (Optometry)
B.Sc. (Radio Therapy Technology)
Bachelor in Hospital Administration (BHA)

PARAMEDICAL DIPLOMA COURSES (APPROVED BY RAJASTHAN PARAMEDICAL COUNCIL)
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- Diploma in Radiation Technology
- Diploma in Ophthalmic Technology
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- ***Diploma in Operation Theater Technology***

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PLEASE CALL FOR COURSE ENQUIRY BETWEEN 9.30 AM TO 6.00 PM

ADMISSION & ELIGIBILITY CRITERIA :
Please visit University website and admission notifications for details. Applicants are advised to visit University website during admission time for latest updates on admission & eligibility criteria, Fee Structure, how to apply, last date to apply etc...

HOW TO APPLY : Application forms can be downloaded from the University website or can be obtained from University campus by paying prescribed fee (Except MBBS, MD/MS, DCP, BDS, Nursing & all Paramedical Diploma, where admission are done through entrance exam / counseling.)

Geetanjali Medicity, N.H. 8 Bypass, Near Eklingpura Chouraha, Udaipur Rajasthan

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