NEWSLETTER
OF
ASIA PACIFIC ARTHROPLASTY SOCIETY
ISSUE 06 | MAY 2023

CONTENTS

THE VERY EARLY DAYS OF APAS

Great organisation have curious beginnings. Some are planned, some perceived while some are created on a whim, a fancy, almost as a wishlist.

APAS – Asia Pacific Arthroplasty Society as we all know it today was conceived as Wishlist

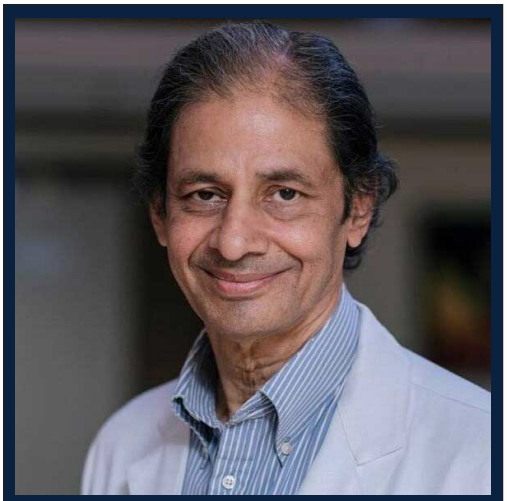
The year was 1999 I was on a trip to Australia to meet with my good friend Wui Chung. After a day or two of academic deliberation and evenings of mirth and drinks, we both planned to go to Surfers paradise to catch up with another dear friend Ray Randle. The trip done, academic set aside, we decided, on my second last evening to go by the sea side to quench our "thirst". After a few rounds of "seasoned barley water intake", the atmosphere turned surprisingly sombre, serious, and remarkably "Academic". Regaling each other with our tales of travels and academia we asked each one to state one wish we wanted to achieve. Remarkably all three said the same thing. We all expressed a desire to create a forum which could deal with aspects of Arthroplasty pertinent to this region, have deliberations, exchange view points , teach and train youngsters and create a group of like minded individuals who could nurture this idea and create a platform that could address these issues. Chung then informed us that Dr Ranawat was also landing that evening and we should have his inputs on this issue as well. We called it a night, planning to continue the conversation the next day with Dr Ranawat joining the deliberations. After yet another day of academics, operating and camaraderie the three musketeers went back to same beach and restarted deliberations on our conversations joined this time by the erudite and wise Dr C S Ranawat

The meeting was crisp, succinct and pertinent. Any lingering questions or doubts in our minds were quickly dispelled by the wisdom and clear thinking of Dr C S Ranawat. It was time for the birth of the Society.

Over the next 30 minutes or so with suggestions from all, "Asia Pacific Arthroplasty Society" was created and formed. Ray Randle was requested to be the First President. Dr C S Ranawat, The patron, Chung offered to be the Emeritus Chair, and yours truly accepted the role of Founding Secretary of APAS.

On the Beaches of Surfers Paradise was born APAS, with a decision to hold the first meeting in New Delhi in 2000 with me as the Organising Chairman.

From this rather accidental but Enigmatic beginning we have come a very long way to become a robust academic institution with wonderful meetings. The number of members, and attendees at our conferences are truly a testimony to the contribution of many friends who have all contributed unflinchingly to grow this organisation. This, My friends is the story "From Conception to Delivery" of APAS.



Dr Ashok Rajgopal
Medanta Medicity, Gurgaon, India

LETTER FROM THE PRESIDENT'S DESK

Dear APAS Members,

It would appear that humanity is on the threshold of a world unknown, and vast areas of human activity are likely to metamorphose in manners and forms which will require a new understanding and adaptability of life different from what we have known until now. You guessed it right! I am referring to the new kid on the block – Artificial Intelligence (AI)! It has been predicted that AI is likely to have as much impact on life on Earth, especially human life, as when humans first learnt how to create and control fire, invention of the wheel, advent of the internet, and events of nature such as the Ice Age.

The pace at which AI algorithms are evolving, both Narrow Intelligence and General Intelligence, is making it almost impossible for societal systems to react and adapt to the changes it is causing.

It is already well demonstrated that AI interpreted radiology reports have much higher accuracy and dependability as compared to reporting by trained radiologists. It is unlikely that our fraternity of Arthroplasty surgeons and their work area will remain isolated from this force which has been unleashed. Whilst advances such as navigation and the added layer of robotics (both non-autonomous/haptics and autonomous varieties) have been impacting the science of Arthroplasty for the better part of 2 decades, AI in its true sense has not yet been recruited in this technical advancement. One wonders whether a scenario wherein the entire process of clinical evaluation, diagnosis, treatment decision-making, operative planning and the entire sequence of operative steps being performed by an AI driven robotic system is just round the corner!

Whilst a robot on its own might be unlikely to handle the dissection of soft anatomy with all its variables, an AI driven robotic machine with visual and tactile sensors embedded in its end organs might be able to perform the task with the same, if not better, judgement that the human surgeon has at his/her command.

These scenarios bring with it an unending list of imponderables such as –

Who would be legally responsible for an inadequate result from the patient's perspective?

Would there be adequate integration of emotive inputs and responses which inevitably form a part of the expectation that all humans yearn for when going through a state of sickness?

Would there be enough motivation for bright minded humans to take the arduous path of becoming an accomplished arthroplasty surgeon if at the end of the path all that awaits is a lifetime of observer ship of other humans needing medical/surgical help being handled entirely by AI driven systems which don't require any significant inputs from the human surgeon?

Lastly, for the foreseeable decades any of these advancements including the present status of robotics, require daunting levels of capital and operational expenditure. Would it be logical, or even fair, to make these systems as the standard of care in lieu of established and clinically validated methodologies, thus increasing the monetary burden on all stakeholders? This question becomes even more relevant when being answered affirmatively whilst considering relatively miniscule gains on the wide canvas of global health economics.

Friends, we are living in interesting and intimidating times. There is lots of food for thought and the only way to digest "this food" is to ruminate and chew the cud! This is best done in company of each other and for that – I invite all of you to join us in the forthcoming APAS meeting from 21-23 August in the beautiful setting of the Philippines islands, and the vibrant city of Cebu.

Dr Bharat Mody
Welcare Hospital, India

MEMBER SPOTLIGHT

LET'S GET TO KNOW DR. YONG IN!

My first participation in the APAS meeting was in 2009, which was held in Xian, China. At that time, I was one of the attendees who presented a free paper. Over the years, I have become a faculty member of the APAS, and it is a great honour to be able to share my profile with fellow APAS members through this newsletter.

I graduated and trained as an orthopaedic surgeon at Seoul St. Mary's Hospital, The Catholic University of Korea, and I still work there as a knee surgeon and professor. I learned knee surgery from my professors Jung-Man Kim and Young-Kyun Woo, when cruciate-retaining (CR) total knee arthroplasty (TKA) was the mainstream. I believe that CR TKA is a very kinematic surgery that is being talked about these days if a proper PCL can be obtained. After a five-year surgical career as a CR TKA surgeon, I had the chance to work at Orthoapedic Hospital in LA, California, as an international fellow from 2005 to 2006. There, I learned about posterior-stabilized (PS) TKA from Dr. Thomas P. Schmalzried, and I became a follower of PS TKA.

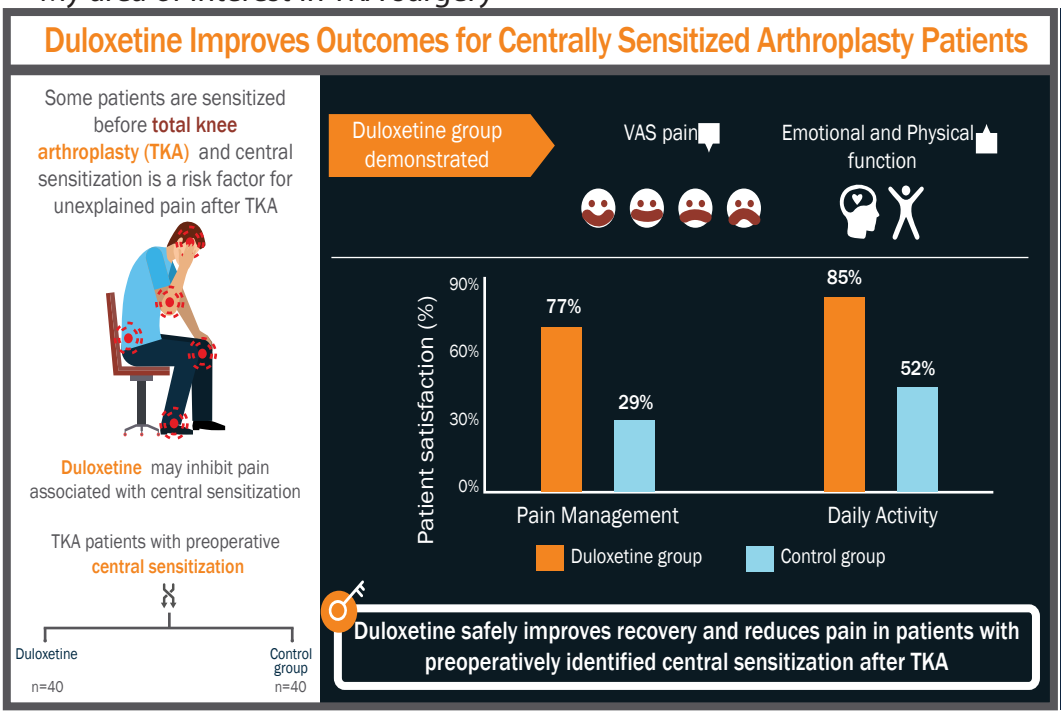
My area of interest in TKA surgery is patients' pain sensitivity and central sensitization. Having experienced patients who are dissatisfied with so-called well-done TKA, I wanted to identify the causes of unexplained pain following TKA. Most surgeons try to find reasons from surgical factors such as implant position, gap balancing, or complications related to implants. As we know, a certain percentage of TKA candidates have psychological problems or mental illness. I focused on individual patients' pain sensitivity, which is associated with central sensitization. Central sensitization is a neurophysiological phenomenon characterized by hyperexcitability in the central nervous system. I learned to screen central sensitization using the Central Sensitization Inventory (CSI) and found that 20% of my TKA candidates are centrally sensitized before undergoing surgery. The management of central sensitization in TKA candidates falls on ourselves, the TKA surgeon.

I hypothesized that duloxetine, a selective serotonin and norepinephrine reuptake inhibitor (SNRI), might help control pain caused by central sensitization. In 2016, I conducted a randomized controlled trial and found that duloxetine could reduce postoperative pain and improve the quality of recovery after TKA in patients with central sensitization.

The results of the research were published in 2019 (Infographic, J Bone Joint Surg Am. 2019 Jan 2;101(1):64-73. doi: 10.2106/JBJS.18.00347). Currently, in my practice, TKA candidates are screened for central sensitization preoperatively, and centrally sensitized patients are prescribed duloxetine pre-emptively. After the duloxetine study, I extended my research boundaries to neuropathic pain and multiple joint pain in TKA candidates.

As a knee surgeon, my area of expertise is surgeries for knee osteoarthritis. Apart from TKA, I also perform Osteotomies around the knee joint and Unicompartmental Knee Arthroplasty. I believe having a broader range of surgical skills is important as the gray zone between surgeries, cases where either of these surgeries could be justified, is decreasing.

I am looking forward to fruitful and productive interactions with my fellows APAS members in the times to come. Thank you!



Dr. Yong In
St. Mary's Hospital, South Korea

BEING A WOMAN WITH AN ORTHOPAEDIC ARTHROPLASTY CAREER

"Nothing can stop a girl with a dream and a strong will to achieve it." This quote by Gabrielle Giffords perfectly sums up the journey of a woman with an orthopaedic arthroplasty career. For women who aspire to become an orthopaedic doctor, the journey is not an easy one. It is a path that demands determination, perseverance, and resilience, as they work in a "masculine" environment with physically heavy workload, long working hours, and have to face biases in the career path. As the famous feminist icon, Gloria Steinem once said, "The story of women's struggle for equality belongs to no single feminist nor to any one organization but to the collective efforts of all who care about human rights."

However, women in orthopaedic arthroplasty are not deterred by these challenges. They rise above them with a passion for healing, a thirst for knowledge, and a commitment to excellence. Their hard work and dedication are a testament to the fact that nothing can stop a girl's dream of becoming whatever she wants. And women in orthopaedic arthroplasty are a shining example of breaking down barriers and paving the way for future generations of female doctors.

As we all know, women have been underrepresented in the field of orthopedic surgery for a long time, and despite some progress, there is still a lot of work to be done to ensure equal opportunities for women in this field. One of the most crucial factors that need to be developed to facilitate female orthopedic doctors is the availability of fellowship opportunities that are specifically designed for women. It is essential to create such opportunities to ensure that female surgeons receive the necessary support and training to develop their skills and advance their careers.

Furthermore, sponsorship opportunities that are not biased in choosing the surgeon who will be sponsored are also important. We must ensure that sponsorship decisions are based solely on merit and not on gender. This will help to provide equal opportunities for female orthopedic doctors to advance in their careers.

Another critical aspect is women empowering women, or creating a wing of female ortho surgeon juniors to get mentoring or concessions from their seniors to play roles that are covered locally or internationally. This will create a supportive environment where women can learn from one another and provide mentorship to help the next generation of female surgeons.

Additionally, there should be availability of seats in the organization to occupy important positions as chairs or in committees. This will ensure that women have a voice in decision-making processes and can play an active role in shaping the future of the field.

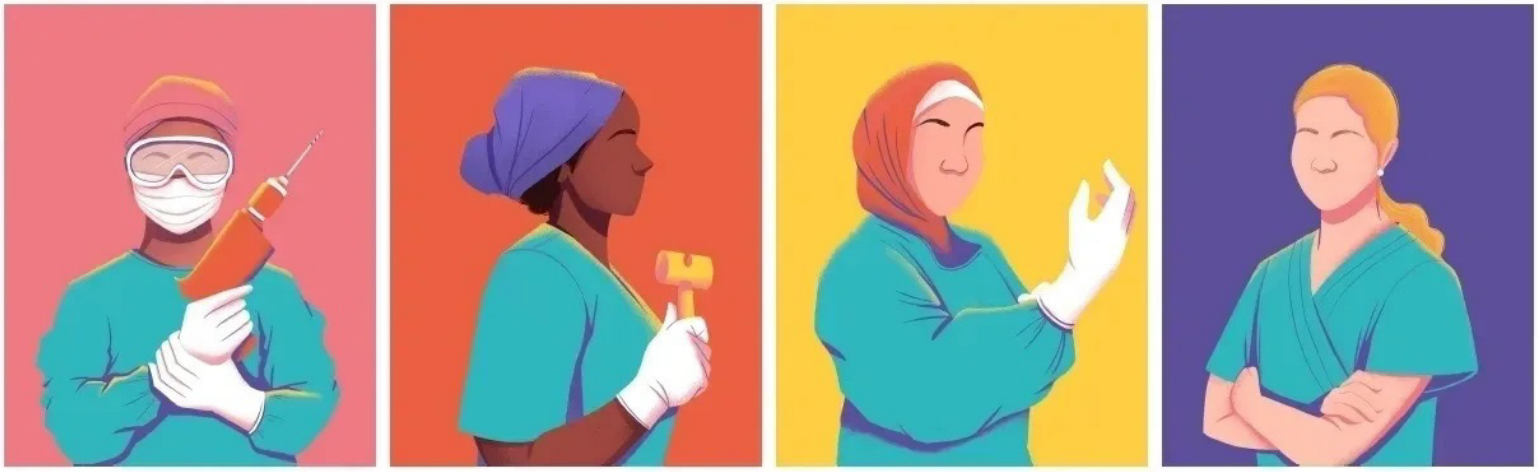
I would like to emphasize that female orthopedic doctors have the same intellectual abilities as male doctors, and it is hoped that they will get equal opportunities in their careers and self-development. It is also essential to make it easier to interact and communicate and understand aspects of women's lives with their complexities as humans, their role as mothers, wives, not just as patients. This will enable us to provide more comprehensive and effective care for our female patients.

However, it is also important to recognize that there are some challenges that female orthopedic doctors face, such as the need for an ergonomic tool that is specifically designed for them. We need to develop tools that take into account the size and power differences between male and female hands, ensuring that female surgeons can perform their work comfortably and safely.

In conclusion, we must continue to work together to promote equal opportunities for female orthopedic doctors. By creating fellowship and sponsorship opportunities, empowering women, and providing support for women to take on leadership roles, we can ensure that female orthopedic doctors can reach their full potential and contribute to the advancement of the field.

Dr Azeta Arif
Santosa Hospital, Indonesia

APAS / ZIMMER BIOMET WiA TRAVELLING FELLOWSHIP



In 2022 at the Bali Hip Knee Summit conference, APAS initiated the Women in Arthroplasty program to support our female arthroplasty colleagues and recognize their contribution to the subspecialty of lower limb arthroplasty. Our inaugural members were A/Prof. Catherine McDougall, A/Prof Claudia di Bella, Dr Azeta Arif and Dr Karina Besinga.

Following discussions on how to foster and encourage our younger female colleagues to tread the path of lower limb arthroplasty, APAS is delighted to announce that with the support of Zimmer Biomet we have launched the Women in Arthroplasty Travelling fellowship program.

APAS received applications from 12 very good candidates and 5 were shortlisted for interviews. From this group 2 were selected and we are happy to congratulate the 2 successful candidates of the inaugural Women in Arthroplasty travelling fellowship to Dr Joyce Garcia from Manila, Philippines and Dr Neha Patel from Ahmedabad, India.

Dr Garcia completed medical school in Manila, orthopaedic training at St Luke's Medical Centre in Quezon city where she received the outstanding resident award from the Philippine board of orthopaedics. She then completed post graduate training in Singapore NUH. She now works at 4 hospitals close to Manila

Dr Patel completed medical school in Ahmedabad where she achieved top student in surgery, orthopaedic training in Sangli and post graduate training in GS medical College and Kem Hospital Mumbai. She now works at 3 hospitals in Ahmedabad and speaks English Hindi and Gujrati. She is a published photographer and enjoys reading, playing piano, and listening to music.

Our 2 fellows will travel to Brisbane, Melbourne and Sydney then to Jakarta and Bandung before completing their tour at the APAS ASM in Cebu in August. They will spend time with senior mentors observing surgery and clinics and participating in a variety of department activities hopefully establishing good links and getting a much wider regional perspective on orthopaedics and arthroplasty.

We look forward to a report on their travels and experience after their fellowship is completed.

ENHANCED RAPID RECOVERY PATHWAYS IN JOINT REPLACEMENT : SHORT STAY AND OUTPATIENT

Dr Sol Qurashi
Nepean & Hawkesbury Hospitals, Australia

The concept as we all know has been talked about quite a lot in the last 5 years or so and very topical in Australia. The underlying principles are that of Enhanced Recovery After Surgery or 'ERAS' and that philosophy is over 20 years old. The application of multiple Multidisciplinary interventions at various points of the patient's surgical journey to make the surgical experience a bit 'gentler' on the body by reducing the physiological stress response. By positively effecting parameters such as pain, blood loss, postoperative nausea and vomiting, early mobilisation, the aim to achieve a quicker functional recovery. One of the side benefits (and not the primary aim!) of all this is also a reduced length of stay (LOS). LOS is often used as an index of performance and a quality metric by which efficiency and cost can be measured. And whilst, as doctors, our focus is on the patient having a better experience and quicker functional recovery, the economic benefits cannot be understated.

Lured by the prospects of substantial savings, Rapid Recovery models of care are being explored with vigour, particularly by the funding bodies, both in the public and private sector. However, whilst it is important to seek efficient practices and savings in a world of finite resources, medical decisions about patient care must be made by doctors so that patient focus can be maintained.

Although the detailed recipes of Rapid recovery models of care are well published in the literature, in my experience, the secret to a successful ERAS short Stay model of care is no different to how most orthopods run a successful practice…. by running a tight ship.

A healthy, socially supported, motivated patient who is well educated to the plan and empowered combined with perioperative optimisation, steroids, pre-emptive analgesia, non-sedative, opioid free or opioid sparing anaesthesia, minimally invasive techniques, Local Infiltrative Analgesia(LIA), Postoperative Nausea and Vomiting (PONV) prophylaxis, early mobilisation, multimodal analgesia, all lead to a smooth early discharge. Discharge into a supported environment with an easily accessible communication channel to the surgeon / treating team allows the patient to continue recovering at home and minimise the risk of preventable complications and a readmission. For this to happen, all stake holders have to be on the same page. This includes the patient, their family, hospital administration, nursing and allied professionals, the surgeon, anaesthetist and the family doctor.

With the above criterion met, there is every reason for an ERAS Rapid Recovery / Short Stay/ Outpatient model of care to be successful at delivering a happy patient with an equally good if not better outcome and with substantial cost savings for the system.

MESSAGE FROM THE EDITOR'S DESK

Dear Readers,

As we enter the second half of 2023, it is an exciting time for us as we prepare for our upcoming Annual Scientific Meeting, which will be held in Cebu, Philippines from August 21-23. I encourage all readers to attend the meeting and take advantage of the opportunity to connect with colleagues, exchange ideas, and learn about new technologies & techniques from the very best in the field. It is a chance to strengthen our professional network and stay abreast of the latest developments in the world of Arthroplasty.

Furthermore, I would like to extend an invitation to our members to submit their work for publication in our newsletter. The newsletter is an excellent platform for sharing your research, insights, and experiences with the wider arthroplasty community through case reports, clinical studies, and opinion pieces. Our editorial team is always on hand to provide guidance and support throughout the submission process!

See you all in Cebu!

Dr Kshitij Mody
Welcare Hospital, India

ARTHROPLASTY QUIZ

1. Ultra- high molecular weight polyethylene is defined as polyethylene with an average molecular weight greater than __ million g/mol :

A. 1
B. 10
C. 3
D. 7

2. What is true while doing anterior referencing for femoral cuts

A. Flexion gap is constant but there is danger of notching the anterior femoral cortex
B. Size of the component is based on the amount of femoral condyles that is removed
C. Under resection will cause flexion instability
D. Over resection will lead to loose extension gap

3. All of the following are considered high risk factors for dislocation in THR except:

A. Impingement of prosthetic neck on the acetabular component.
B. Fracture Neck Femur as the primary pathology
C. Use of 22mm heads.
D. Posterior surgical exposure
E. AVN as primary pathology

4. . When comparing total knee arthroplasty (TKA) with unicompartmental knee arthroplasty (UKA) which of the following statements is NOT true?

A. Tibial resection made at right angles to the mechanical axis of the tibia, similar to that of total knee arthroplasty, is rarely suitable for UKA due to the intraarticular obliquities of the medial compartment.
B. Longevity of UKA is equal to TKA.
C. UKA surgical procedure can correct alignment only within the joint.
D. UKA differs from TKA in that alignment can be corrected only to the normal tension of the knee ligaments.

5. Which of the statements regarding Total Hip Arthroplasty in young patients is false?

A. Higher patient activity results in higher wear rates.
B. Studies of young patients have demonstrated a relationship between the amount of wear and the age of the patient, the revision rate, osteolysis and aseptic loosening.
C. The survival rate of artificial joints in patients younger than fifty years of age is approximately 80% after ten years or more, regardless of the fixation technique and bearing combination.
D. In chronological order, the categorical factors limiting the function and longevity of a total hip prosthesis are - osteolysis (often associated with wear of the bearing), fixation of the implant to the bone, surgical technique, fatigue failure of the implants, and long-term skeletal re-modelling.

6. According to Paprosky classification for femoral defects a defect characterized by extensive loss of metaphyseal bone with a completely intact diaphysis will be classified as:

A. IIIB
B. IIIA
C. I
D. II

7. The most commonly approach used for revision hip Arthroplasty is:

A. Anterolateral
B. Watson Jones Approach
C. Posterior
D. Anterior

8. What is not true regarding difficult exposure of the knee?

A. When mobilizing the patella it is important to perform the lateral release and increase the external rotation of the tibia so that the patella can be subluxated laterally rather than everted.
B. In extremely high BMI patients, everting the patella becomes easier if space is created by making a pocket in the subcutaneous fat lateral to the patella.
C. When exposing the stiff or ankylosed knee there is a higher risk of avulsing the patellar ligament attached to the tibial tubercle.
D. During lateral dissection, often the popliteus insertion and fibular collateral ligaments need to be released at their insertion.

9. Which of the following is not a relative indication for preferentially using PS(Posterior Substituting) type of knee over CR(Cruciate Retaining) Knees

A. Patients suffering from RA
B. Posterior instability
C. Post patellectomy patients.
D. Fixed varus deformity greater than 10 degrees

10. Which of the following statements regarding the valgus knee is false?

A. In valgus knees lateral soft tissue structures including LCL, ITB and lateral capsule contract while medial tissues become stretched
B. While balancing a valgus knee, most of the release is performed from the lateral tibial condyle.
C. Lateral femoral condyle has often been shown to be dysplastic in valgus deformities.
D. Most of the bony deficits occurs on the femoral side

ANSWERS TO FOLLOW IN NEXT ISSUE!

Email your answers to drkshitijmody@welcarehospital.co.in
One lucky winner gets a reward!