

## Three decades of Presenting the Presentations

**Dr. Gaur Gautam Kar**

Secretary, KASS

Exactly thirty years back, in 1988, Calcutta University, in its PG entrance result, declared that I would be an orthopaedic surgeon... and lo! I entered the world of presentations, as part of the PG course. Over the next two years, I was associated with quite a number of presentations: directly and indirectly (moonlighting for others). The young generation probably will never know what we the old-timers went through those days, just to prepare a presentation.



which colour. They photographed those papers on special 'litho' films, and then, on those 24x36mm canvas, they had to manually colour the words/sentences. So far the photographs were concerned, we had to take them on 'positive' films like Ektachrome (Kodak) or Fujichrome (my personal choice because it was cheaper and more befitting my stipend of Rs. 1450/-), rely on our photographic skills and luck till they were all consumed (36+ films in one roll) and then developed and

So, I think this is the time to dig in and dig out.

Those days, everything was MANUAL! We wrote, with coloured special sketch pens, on transparent A4 sized acrylic sheets (called OHP sheets) and then manually load and changed them on the illuminated flat glass of a mammoth called OHP (overhead projector) to enjoy our few minutes of glory, showing our handwriting and pictures. I was quite good at writing and drawing, so I had to work overtime for others... after all, could I really ignore somebody who took me to the samosa shop, or in some instances, who was my teacher? These artworks were confined to the departmental/in-hospital presentation though.

The more elegant way to present, in conferences, was to prepare physical SLIDES. The matter for those were typed on paper (later 'electronic typewriter' provided FONT CHOICE !!!) and submitted to graphics people at least a month and a half prior to the conference date (THEY had to cater to doctors, engineers, researchers etc. etc. so there was rush and missed deadlines) with clear instructions about which line/word has to be in

mounted on card slides. Next came the tedious job of squinting through all of them (24x36mm each), holding against light between thumb and index... and arranging in proper order in two groups... one for letters, another for photographs. Yes, there was no way to have clinical photographs AND text content in the same slide! Halls were equipped with 'dual projections'... two projector screens side by side.

Next chore was to load them in two 'carousels' for previewing them in two projectors side by side and somehow we managed to synchronise. The A/V people neatly labelled them and carried them to the hall. Then, sometimes, came the funny part. One carousel got stuck and another, by a deft thumb of an operator, got advanced without advice. Then its just a comedy of mismatch error, to the enjoyment of the audience and distress of the speaker and A/V guys. And heaven forbid, if one slide gets dropped or lost, I still shudder with the thought.

Contd. on page 3



THE OSTEOLASTS. In their very own blasting mood in KUPLIC 2018 at Swabhami



INDO-NEPAL ACADEMIC NEIGHBOURHOOD. Chance made us neighbour, choice made us friend

## Piece of Mind

Life Infinite

**Dr. M. N. Basu Mallick**

Convenor, KASS

How many of us would be interested if a tonic is available that could make us live upto 200 years?

Not interested? Let me then make the offer better! You can have one or all of the following benefits.

You can share it with five other people you want and let them live upto 200 years as well. Or, you can choose to stagnate your current health and looks. So that you retain your current looks and state of health for rest of your life. Or, you can choose to receive a lifetime pension along with.

As the options get better, more and more number of people find the offer interesting. It also starts to dawn on people that long life brings with it a long list of problems which we will need to be prepared to handle.

What if humans were designed to live 200 years? Will we be happy with that? 200 years average life span will mean all our friends and family will live that long, youth will last longer, and old age would come much later, which is not so bad. And because we'll be planning our life for 200 years, school will be 20 years, college for another 20 years and possibly 100 years of job. That would mean more leisure and more time to make and save money and more time to enjoy all that we earn.

On the flip side, there will be too many people around and world will be really really crowded. Job vacancies will become sparse and promotions will come to a trickle. Governments will be hyper-stretched to provide facilities for so many people. To slow down population growth (and to prevent school going kids from becoming

parents), age of marriage will be pushed back to 50, or may be 70. But what about our hormones?

They still will be kicking in at 12-13 years. So, you will be left holding your guns for 45 years (puberty to marriage

-ble age) with your hormones bursting through your seams. POCSO act will apply to people upto age 50, employing someone of 40 years age will be considered child labour.

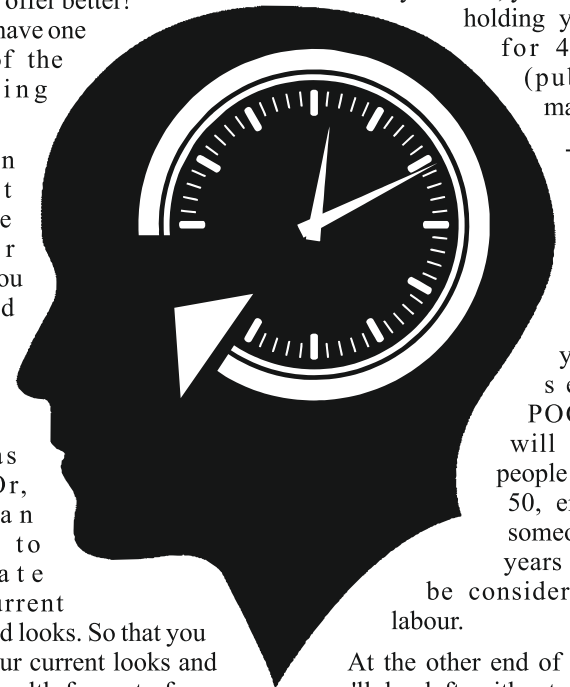
At the other end of our lives, we'll be left without a job, or hormones, for the last 60 years. 60 YEARS OF RETIRED LIFE!! No ammo, no guns to fire at all. Plus, your spouse of 150 years will still be around to keep an eye on you and your guns. That's going to very very boring, right?

To tackle boredom, people will go on vacations, or find new hobbies. Since most places on this planet would have been covered twice over by that time, people would want to have moon or Mars and Venus vacations. Casinos and nightclubs will have to be built there to entertain people on dry arid landscapes. But that would be boring. Decades of visiting the doctors will also be boring. Decades of nightclubs, partying, booze, sinning - all so boring, boring, boring!!

If looong looong life is so damn damn boring, why is the scientific fraternity trying so hard to extend human life?

P.S. Coming back to the original tonic of life, what if it came with a switch that allowed you to turn off the effects and die whenever you wanted - will you be interested?

If you got two switches, yours and your spouses, which one will you press first? And, why?



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# Arthroscopic knot tying techniques



**Dr. Arnab Karmakar**

Website In-charge, KASS

## Surgical technique

Prior to developing the topic of arthroscopic knot tying, some knot terms should be clarified. The two free ends of any given suture are referred to as 'limbs'. A knot is made up of a series of loops passed around the 'post' limb. The limb that is not currently acting as the post is by default the 'non-post'. The post is not always the same limb and, in fact, it can be changed with every throw if desired - it is simply the limb the loops are being thrown around.

## Selecting the right arthroscopic knot

The basic objectives of tying an arthroscopic knot are to: (1) Provide good tissue loop tension to approximate the desired tissues, and (2) To maintain this tension as the tissues are loaded post-operatively. The ideal knot is one that accomplishes these two objectives with the smallest bulk and greatest ease of tying.

## Sliding versus non-sliding

Sliding knots inherently provide better tissue loop tension, but also inherently loosen more easily than non-sliding knots. As arthroscopic

knot tying has evolved, it has proven easier to devise techniques to keep a sliding knot from loosening than to get good tissue loop tension from a non-sliding knot. Consequently, sliding knots are preferred to non-sliding knots for all arthroscopic knot tying.

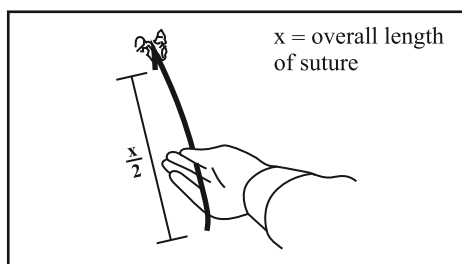
## Non-locking versus locking

Two fundamentally different approaches to the prevention of loosening have been developed for sliding knots: throwing additional loops on top of the sliding knot after it is seated, and changing the sliding knot into a non-sliding knot after it is seated.

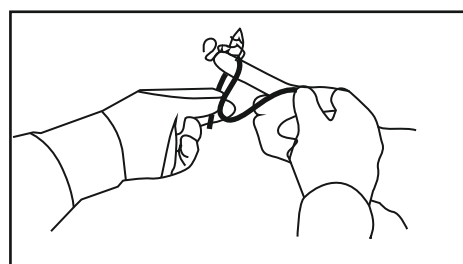
An alternative method of preventing sliding knots from slipping is the locking sliding knot. A locking sliding knot is one whose configuration can be selectively changed by applying tension to the suture limbs in the appropriate sequence.

For the average arthroscopist, the best knot to learn is probably the Duncan loop backed by alternating post half hitches in light of the Duncan loop's proven effectiveness, relative ease of tying, and predictability.

## Basic tips

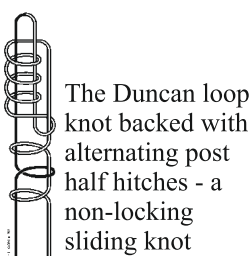


Non-post limb adjusted so it extends about half of overall suture length farther than post limb from cannula



Suture being held between left thumb and middle finger, leaving the index finger free to help with knot tying

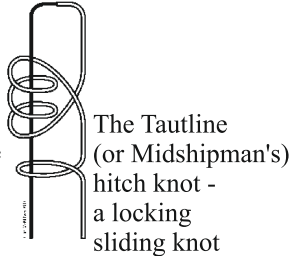
## Different knots



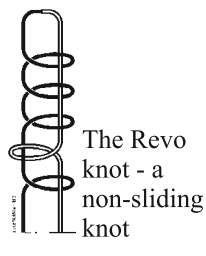
The Duncan loop knot backed with alternating post half hitches - a non-locking sliding knot



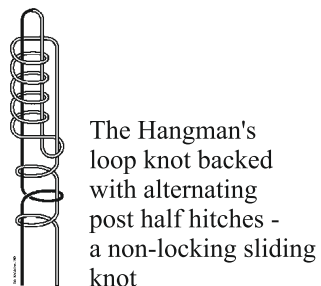
The Tennessee slider knot - a non-locking sliding knot



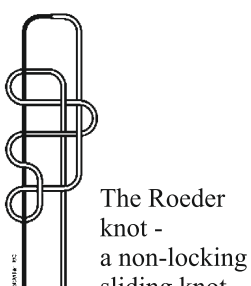
The Tautline (or Midshipman's) hitch knot - a locking sliding knot



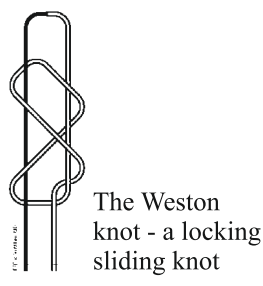
The Revo knot - a non-sliding knot



The Hangman's loop knot backed with alternating post half hitches - a non-locking sliding knot



The Roeder knot - a non-locking sliding knot



The Weston knot - a locking sliding knot

# MIND BENDERS

- Posterior glenohumeral instability can be tested by?**
  - Jerk test
  - Crank test
  - Fulcrum test
  - Sulcus test
- Which of the following movements will be affected if the greater tubercle of the humerus is lost?**
  - Abduction and lateral rotation
  - Adduction and flexion
  - Adduction and medial rotation
  - Flexion and medial rotation
- Calcification of meniscus is seen in**
  - Hyperparathyroidism
  - Pseudogout
  - Renal osteodystrophy
  - Acromegaly
- which activity will be difficult to perform for a patient with ACL deficient knee?**
  - Walk downhill
  - Walk uphill
  - Sit cross leg
  - Getting up from sitting
- Painful arc syndrome is seen in all except?**
  - Complete tear of supraspinatus
  - Fracture greater tuberosity
  - Subacromial bursitis
  - Supraspinatus tendonitis
- Most common ligament injured in ankle sprain?**
  - Anterior talofibular
  - Posterior talofibular
  - Deltoid
  - Calcaneofibular
- Putti-Platt operation is used for**
  - Non union of humerus
  - Dislocation of patella
  - Dislocation of radial head
  - Recurrent dislocation of shoulder
- Which of the following is not true about posterior dislocation of shoulder**
  - Recurrent dislocation can develop
  - Reduction can be unstable
  - Patients with unreduced dislocation can have good function
  - Clinical diagnosis is easy
- Which of following is the commonest cause of loose body in the knee joint.**
  - Tibial spine fracture
  - Osteochondritis dissecans
  - Torn meniscus
  - Intra-articular fractures
- Which of the following statement is not true about severe varus strain injury of knee**
  - Usually no specific treatment is required
  - Fracture of head of fibula should arouse suspicion of this injury
  - Lateral popliteal nerve can be damaged
  - Stress radiographs are required to confirm the diagnosis
- Arthroscope was invented and first used by**
  - Takagi
  - Watanabe
  - Dandy
  - Patel
- What is the usual treatment for symptomatic old acromio-clavicular dislocation**
  - Arthrodesis of acromio-clavicular joint
  - K-wire fixation of joint
  - Lag screw fixation of joint
  - Resection of outer end of clavicle

1. **Ans. A.** Tests for posterior shoulder instability - Jerk test, Post apprehension test, Circumduction test, Post drawer test, Push-pull test, Jahnke test. | 2. **Ans. A.** Muscles attached are - Supraspinatus, Infraspinatus, Teres minor. | 3. **Ans. B** | 4. **Ans. A** | 5. **Ans. A** | 6. **Ans. A.** Anterior talofibular part of Lateral collateral ligament. | 7. **Ans. D.** Putti-Platt operation consists of reefing of anterior capsule of shoulder joint and subscapularis muscle and is used for treatment of recurrent dislocation of shoulder. Aim of operation is to limit external rotation which causes humeral head to dislocate. | 8. **Ans. D.** Diagnosis of posterior shoulder dislocation can be often missed and is not easy both clinically and radiologically. Reduction is quite often unstable and shoulder spica is required with shoulder in abduction and external rotation. Recurrent dislocation can develop and axillary nerve injury is uncommon since posterior dislocation does not stretch the nerve which courses from posterior to anterior. | 9. **Ans. C.** Statistically torn meniscus is the commonest cause of loose body in the knee joint fractures and osteochondritis dissecans are second and third common causes of intra-articular loose body. | 10. **Ans. A.** If the injury is severe operative repair of torn structures (lateral collateral ligament, lateral capsule and biceps femoris) is required followed by plaster immobilization with knee 30 degrees flexed. X-ray may quite often be normal or may only show avulsion fracture of head of fibula. Stress radiographs or examination under anaesthesia will reveal full extent of damage. Lateral popliteal nerve can also be damaged due to traction injury. | 11. **Ans. A.** First prototype of arthroscope was made and used by Takagi in 1918. Modern day arthroscope was made by Takagi and Watanabe. Dandy, Jackson and Patel are some of the leaders of arthroscopic surgery now-a-days. | 12. **Ans. D.** Resection of outer 1" of clavicle and capsulorrhaphy produces satisfactory amelioration of symptoms. Transfer of tip of coracoid with its attached muscles is next best method of treatment. K-wire and lag screw fixation are the treatment of acute dislocation. Arthrodesis of acromio-clavicular joint is almost impossible to achieve and if achieved will greatly impair the mobility of shoulder girdle. Acromionplasty is used for intractable cases of impingement syndrome.

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**KLOLIC 2019**  
Kolkata Lower Limb Course 2019  
17th - 19th May, 2019  
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**AREA IN FOCUS**  
Hip | Knee | Foot

**ATTRACTIONS**  
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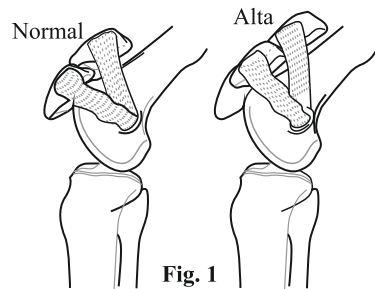
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Italy

# The anatomical factors model of patellar dislocation

Adapted from the work of Dr. Robert Steensen, Columbus, Ohio, USA

Dr. M. N. Basu Mallick

Convenor, KASS



## Increased Q-angle

The laterally directed vector of forces acting on patella during extension (Fig. 2), may be increased in Genu valgum, Lateralised tibial tubercle, Increased TT-TG distance

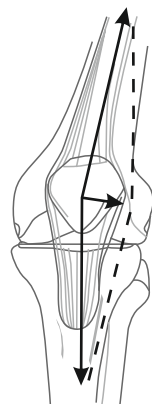


Fig. 2

## Rotational deformity

Intorsion of femur or Extortion of the Tibia results in increase of TT-TG distance and also of the Q-angle. This is difficult to appreciate in X-rays but can be diagnosed clinically and confirmed by CT scans if required. Net effect of this rotational malalignment is increased Q-angle.

## Trochlear dysplasia

The sulcus of the femur has been progressively appreciated as a critical factor in patellar tracking. In trochlear dysplasia, the sulcus, most importantly in the superior part of the trochlea is abnormal. This can be suspected in a true lateral X-ray of the knee, but best defined in axial CT/MRI cuts through the

## Trochlear Dysplasia

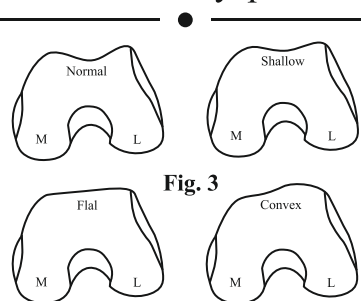


Fig. 3

Many authors have mentioned about the association of anatomical factors and patella dislocation. But the landmark article was one by DEJOUR *et. al.* in KSSTA, 1994. And we believe that these anatomical factors are critically important. That, patella dislocation is not a random event but a mechanical event based on the following anatomical abnormalities. This, we believe explains the vast majority of patellar dislocations. This mechanical event happens when the dislocating forces exceed the restraints.

When the patella dislocates the first time, the medial restraint of MPFL and retinaculum is disrupted. Hereafter, patella stability is completely dependent on anatomical factors as below. Those with compromised anatomical factors proceed to recurring instability. Typically, dislocation is expected to occur when the knee is 'at-risk' position, that of femur being internally rotated in the tibia, and Q-angle is momentarily increased.

This may be compounded by soft tissue laxity, but we believe anatomical factors are the key underlying issue in recurring patellar instability.

The anatomical factors can be enumerated as PQRS

P - Patella Alta  
Q - Increased Q-angle  
R - Rotational Deformity  
S - Sulcus/Trochlear Dysplasia

## Patella alta

Patella engages the trochlea late in flexion. Forces act to dislocate the patella before trochlear engagement. Along with, the MPFL is elongated (MPFL LONGA) which leads to failure of restraint before patellar engagement. As the figure (Fig. 1) shows, the normal MPFL is tight until the patella engages the trochlea. In MPFL longa, it relaxes much before engagement, allowing the patella to dislocate.

proximal part of trochlea. Accordingly they can be described as SHALLOW, FLAT, CONVEX (Fig. 3). Of these, FLAT and CONVEX types are clinically relevant in patella instability. This can be quantified by measuring the lateral trochlear inclination (Fig. 4), or the sulcus angle, though it's difficult in convex dysplasia cases, which is most relevant in these cases. Trochlear dysplasia is easy to

## Trochlear Dysplasia

### Lateral Trochlear Inclination

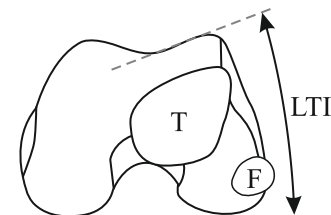


Fig. 4

overlook unless you are specifically looking for it. Dejour found trochlear dysplasia in 94% of cases of patellar instability and in only 3% of normal people. Trochlear dysplasia may cause both the 'J sign' and 'Reverse J sign'.

If we consolidate the anatomical factors, we can divide them into restraining factors and dislocating factors (Fig. 5). We have already

## Anatomic Factors Model

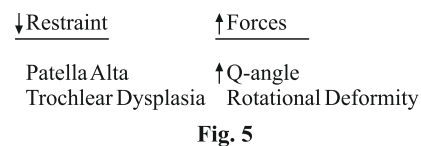


Fig. 5

said, recurring patella instability happens when restraining factors are compromised and dislocation factors are aggravated. As the no. of factors increase, the risk of dislocation increases. As factors combine, risks combine too. For example, a small patella alta plus a small trochlear dysplasia may be a bigger risk than a medium patella alta or a medium trochlear dysplasia alone. As the factors combine, we can have the following combination of factors in any possible scenario (Fig. 6).

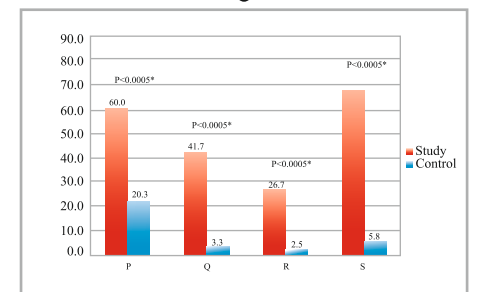
## Anatomic Factors Model

P	PQ	PQR	PQRS
Q	PR	PQS	
R	QR	QRS	
	QS		
	RS		

Fig. 6

An MRI study (Fig. 7) to test this hypothesis in 60 patellar dislocation patients and 120 normal

## MRI Study



Incidence of patella alta (P), increased TT-TG distance (Q), rotational abnormalities (R), and trochlear dysplasia (S). \* Meets statistical significance (p<0.05)

Fig. 7

patients showed trochlear dysplasia as the commonest single factor at 68% even when only FLAT and CONVEX patterns are considered. This is followed by Patella alta (60%) as second most common factor.

This anatomic factors model can explain why recurrent patellar dislocation is more common in females (more valgus knees), bilateral (bilateral anatomic abnormalities). The anatomic factors model can help in risk stratification and strategise treatment (Fig. 8).

## Anatomic Factors Model

### Risk Stratification

Low	Non-operative Care
Moderate	Restorative Surgery (restores MPFL function)
High	Reconstructive Surgery (need to alter anatomy)

Fig. 8

For those patients requiring anatomy correction surgeries, the following strategy may be used (Fig. 9).

## Anatomic Factors Model

### Surgical Techniques for High Risk

P	Distalizing TTO ? Isometric MPFL
Q	TTO, DFO
R	Rotational Osteotomy
S	Trochleoplasty

Fig. 9

# Three decades of Presenting the Presentations

Dr. Gaur Gautam Kar

Contd. from page 1

Then around early nineties, I noticed beautiful, coloured slides at a presentation of Prof. V. T. Ingalhalikar. I guessed (rightly) that those slides were photographed from a computer screen. All the (few) computer-owning people I knew back then, had black and white monitors. I then sweet-talked my tax consultant to BUY a colour monitor (I convinced him that it would impress his clients) computer, with windows operating system. Then I learnt the use of PowerPoint 4.0 from the guidebook and prepared my first, nice 'electronic' slides on his monitor. Took my manual SLR to his office, loaded with a half-consumed Fujichrome film and started experimenting with shutter speeds and aperture settings. Most of them came through and in the next conference, I, with an everted collar, told the A/V to switch off one projector (green thoughts come


naturally to me, no?) as I have text and photographs in the same 'slide'!

A few conference later, the A/V people moved to computer based presentations and WBOA purchased its own colour computer. The then WBOA president took an initiative to create the PAPA (presentation and publication assistance) project. Part of that was delegated to me. Those days, few WBOA members had home computers, and the need was felt for training in the WBOA office. So I arranged for a formal computer proficiency course for the members, in which I played the role of both a student (of an IT guy who came regularly) and a teacher (still I am, I think).

Cut to the present. Now we can build a presentation in a handheld device called a smartphone, share with anybody in

the world in a few sec, and present on a smart TV or a smart projector or as webinar. Without physical and financial constraints. For an oldie like me, it would be befitting to finish with a residual volume breath of nostalgia that I miss those manual days, those queuing in the dingy darkroom of a graphic outfit, those anxious moments when the developed 'positives' were fished out of the drawer of a studio (only a few studios had the expertise to develop positive films). But no, I enjoy this digital age much more, because it allows me to have more time to think rather than do manual build-up. Even so, in the back of my mind, I know that if all the digital systems vanish from the earth, the oldies like me can still survive with our manual skills, which the generation Y shall have to learn from the beginning.

Simply because they were born late.



**ACADEMIC CALENDAR '18 - '19**

**Summer Sessions**

**Clinical Meeting**  
15th June, 2018  
Niramaya Superspecialty Hospital, Kolkata

**Clinical Meeting (Live Surgery)**  
20th July, 2018  
Desun Hospital, Kolkata

**Fall-Summer Sessions**

**2nd Basic Hand Course**  
25th - 26th August, 2018  
Medica Superspecialty Hospital, Kolkata

**Clinical Meeting**  
31st August, 2018  
Medical College & Hospital, Kolkata

**Clinical Meeting (Meniscal Lesion)**  
21st September, 2018  
J. B. C. Hospital, Kolkata

**Winter Sessions**

**Clinical Meeting (Live Surgery)**  
25th November, 2018  
Midnapore

**Clinical Meeting**  
21st December, 2018  
IPGMER, Kolkata

**Clinical Meeting**  
18th January, 2019  
R. G. Kar Medical College, Kolkata

**Fall-Winter Sessions**

**Cadaver Workshop (Ankle Arthroscopy)**  
24th February, 2019  
K. P. C. Medical College, Kolkata

**Clinical Meeting**  
15th March, 2019  
National Medical College, Kolkata

**KASS Talk**  
April 2019  
N. R. S. Medical College, Kolkata



**2nd Basic Hand Course**  
August, 2018



**KASS Clinical Meeting**  
August, 2018



**GLIMPSES**



**KUPLIC 2018**  
May, 2018



**Cadaver Workshops on Shoulder & Latarjet at SSKM & NRS respectively**

