From the President's desk

Dr K R Prathap Kumar

INTERNATIONAL PERSPECTIVE

Brachial Plexus endoscopy

Dr Thibault Lafosse

What's Happening in the Shoulder world

Dr Dipit Sahu.

NON-ACADEMIC CORNER

Running – Cycling - Spine Surgery- and back to Running

Dr SR Sundararajan

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SESI NEWSLETTER

Shoulder & Elbow Society, India

President :
Dr KR Prathap Kumar

Secretary:
Dr Dipit Sahu

From the President's desk

Thank you for the huge responsibility you have entrusted on me as the President of our Society. It has been difficult couple of years due to the pandemic and we were forced to be physically apart. As a result, some of our academic activities were modified but knowledge sharing has never been a problem with the advent of newer technologies. However, I strongly believe that for a young surgeon to become surgically mature, he needs to be physically supervised to improve his craftsmanship in surgery. Now, it is the responsibility of each senior faculty to make sure that the junior surgeons are properly trained and develop appropriate surgical skills.

We will have to work hard to compensate for the lost years of surgical training in the next couple of years. As a specialty group, SESI will be bringing up structured academic programmes for juniors with the help of our members. We will ensure that no upcoming surgeons lack training opportunity across the country. We have many challenges and hurdles; however, we will overcome these problems

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BRACHIAL PLEXUS ENDOSCOPY

The essentials of brachial plexus endoscopy: ***Dr Thibault Lafosse (TL)****, who is an Upper limb and brachial plexus specialist in Annecy, France, answers few important questions on brachial plexus endoscopy, posed by Dr Dipit Sahu (DS), Secretary SESI*

DS: How did the idea of Brachial Plexus endoscopy occur to you?

TL: The idea of brachial plexus endoscopy started around 2005 when we had to work around, protect and visualize the nerves, while performing Arthroscopic Latarjet. Then, we started to perform plexus release for neurological symptoms that sometimes developed after shoulder instability. One of the initial patients for whom we performed a plexus release had presented with long standing neurological symptoms and recurrent instability. He improved after we performed arthroscopic Latarjet and pec minor / plexus release.

DS: What are your main indications for brachial plexus endoscopy?

TL: The main indications are:

1. exposing the brachial plexus while performing arthroscopic Latarjet or massive subscapularis repair.
2. Selected patients with neurogenic thoracic outlet syndrome but no vascular component who have also failed physiotherapy treatment for a minimum of 6 months.
3. Brachial plexus palsy due to traction injury after shoulder dislocation. These patients have fibrosis around the chord and although most of them recover, 10% of these patients will require surgery in the form of plexus release, removing scar tissue, axillary nerve release and exploration for assessment for a future repair .
4. Scapula winging causes the pec minor to contract and may sometimes cause neurological symptoms, Endoscopic plexus release is valuable for this indication.

DS: What challenges did you face during the learning curve of plexus endoscopy?

TL: The first big challenge is to understand the anatomy of the medial, lateral and the posterior chord of the brachial plexus. All the chords are in relation to the axillary artery. When you start performing the plexus endoscopy, you come from the lateral side, so the anatomy is a little different because you are visualizing the plexus from the lateral side.

BRACHIAL PLEXUS ENDOSCOPY

The lateral chord will be anterior, the posterior chord will be posterior and the medial chord will be behind the axillary artery. When you are coming from behind the coracoid, you will see the posterior chord diving into the axillary and the radial nerve. When you come from the front of the coracoid, you will see the musculocutaneous nerve and the lateral branch of the median nerve arising from the lateral chord, and it is easy to get confused between the two nerves

The second big challenge is performing the brachial plexus exploration after glenohumeral dislocation or while repairing a large retracted subscapularis tear after a dislocation. These cases have a lot of scar tissue and , that may make the dissection a bit difficult.

DS: Please give some technical tips for someone who is starting to do plexus endoscopy?

TL: I recommend performing an initial dissection and train for endoscopy in cadavers in an open way via a wide deltopectoral approach. You should identify the pectoralis minor, the brachial plexus, and understand the relations of the plexus with the vein and the artery .

DS: For someone who wants to start performing plexus endoscopy

a) Who will be the ideal patient ?

b) Is brachial plexus endoscopy advisable during Arthroscopic Latarjet

TL: *a*. The ideal patient will be: Neurogenic thoracic outlet syndrome who has failed conservative trial. These patients have minimum fibrous scars and hence ideal patients for the beginners. There should be no vascular component and no cervical rib. The indication of shoulder dislocation with neurology is not the most ideal patient to start because they have a lot of fibrous scars.

b. yes , I recommend performing the arthroscopic Latarjet along with a complete visualization of the nerves. First, I expose the conjoint tendon, then see the axillary nerve and before performing the pec minor

Dr Thibault Lafosse
Upper limb and brachial plexus surgeon

Alps Surgery Institute, Annecy, France

What's happening in the Shoulder World?

Dr Dipit Sahu

- **Shoulder surgery** is advancing at a rapid pace with path-breaking research being introduced regularly.
- The gist of some of the new and interesting research will be published here for the shoulder community.
- *The **"highly impactful"** category will include the high impact articles and the **"something to think about"** space will include new and insightful articles that have a potential to impact our thinking.*

Highly impactful

1.The curious case of the subacromial balloon spacer for massive irreparable rotator cuff tears:

The subacromial balloon spacer is a much discussed topic. The Lancet paper is a UK multi centre trial that compared the subacromial balloon spacer with only debridement and concluded that debridement is actually better in oxford scores by 4 points than the balloon spacer. Another multicentre trial published within a day in JBJS Am was conducted in the USA; this trial compared the spacer balloon with partial repair and after 2 years concluded that the functional outcomes were the same, though the spacer balloon group had faster and better return to ROM.

Take-home: Currently, we do not see any convincing evidence for the widespread use of balloon spacers in irreparable tears

2. Should you be putting the anchors on the face of glenoid or on the edge in Bankart repair

The retrospective study from Japan compared 2 techniques of Bankart repair: Putting anchors on face of the glenoid after denuding the cartilage or putting the anchors on the edge of the glenoid? They concluded that putting the anchors on the face leads to more erosion of the glenoid bone but same functional results and similar recurrence of 15%

Take-home: Stress shielding and denuding of the cartilage may lead to more glenoid erosion with no improvement of functional results

3. MRI and CT scans have the same accuracy for estimating glenoid bone loss?

This study from Germany compared the accuracy of evaluating the glenoid bone loss in CT scans and the MRI...

What's happening in the Shoulder World?

..scans and found them both to be equally reliable and accurate.

Take home: Conventionally, CT scan has been considered to provide a better assessment of the glenoid bone loss than the MRI scans. However, it is an eye-opener and something to consider in our practise as well that MRI can also be used to accurately evaluate the glenoid bone loss

Something to think about

1. **Prediction of non-union**
   This study from UK studied 2234 patients with conservatively managed proximal humerus fracture and evaluated the factors that were responsible for non-union. Three independent factors were found predictive of non-union: Increasing head-shaft translation (>50%), decreasing neck-shaft angle (<90∞) and smoking.

Take home: There was a non-union rate of 10% in this study and the three factors that are important predictors: head-shaft translation >50%, decreasing neck-shaft angle <90∞) and smoking.

2. **Immobilization in external rotation after a single episode of shoulder dislocation seems bette.**
   The study, a Randomized Controlled Trial by Itoi et al is a minimum 16-year follow up study of immobilization in ER versus IR after primary shoulder dislocation. The group who had immobilization in ER had significantly less recurrence than the group immobilized in IR (26% vs 52%)

Take home: It may be slightly inconvenient but not entirely impossible to immobilize in ER after shoulder dislocation because the labral tears may heal better and may have less recurrence in long term follow-up

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Running – Cycling - Spine Surgery and back to Running

Dr S R Sundararaian

Will I run again?!!....was the first question I asked after a long night's stay in the intensive care unit after a dramatic and a rare complication of disc surgery. Such was my passion for running- an interest that I developed over almost a decade. Here I share my journey about how I created the interest, trained and completed a marathon starting at time 0.

Starting tennis was my first step toward fitness. Unfortunately, my journey in tennis was short-lived as I developed shoulder pain due to lateral clavicle osteolysis, that was resistant to conservative treatment.

This was when I thought of picking up running as an alternate sport to keep my fitness going & switched to running.

The serene setting of race-course road Coimbatore helped me run consistently almost every three days a week. A commitment that soon became a pleasurable habit, and in no time, I completed my first goal of finishing 10 km in 60 mins. After months of practise, I managed to finish a half marathon in-2 hours and 20 minutes and then bettered my timing to 1 hour 50 minutes.

A full marathon is 41.2 km & is a real test for physical endurance. I realised the role of hydration & nutrition to push the limits to cross the finishing line. Regular intermittent portions of carbs and proteins and pre & post-run stretches helped me comfortably hit 35 km weeks before the marathon. The day of the full marathon was unforgettable and is a milestone etched in my memory forever. Stillness before a storm' kept buzzing in my head after a short sleep for 2 hours in Chennai as I waited for the full marathon to begin.

Running – Cycling - Spine Surgery- and back to Running

'It was easy for me till 35 km as I was trained enough. But to reach the next 5 km, I took more than one hour. No words can describe the happiness and contentment I experienced as I crossed the finishing line in 4 hours and 40 minutes.

This wasn't the end of my sporting adventures. Post-lockdown cycling suddenly became my favourite sport. Slowly picking up the pace, I could finish 100 km in 5 hours.

However, after my cycling adventure and pushing myself a little overboard, I started developing right-sided radiculopathy & was diagnosed to have L4-L5 disc extrusion.

It is essential to do regular core strengthening exercises. Listen to your body, and don't push too hard. Despite it all, still, you can have setbacks. My problem did not settle with months of conservative treatment and two epidural injections.

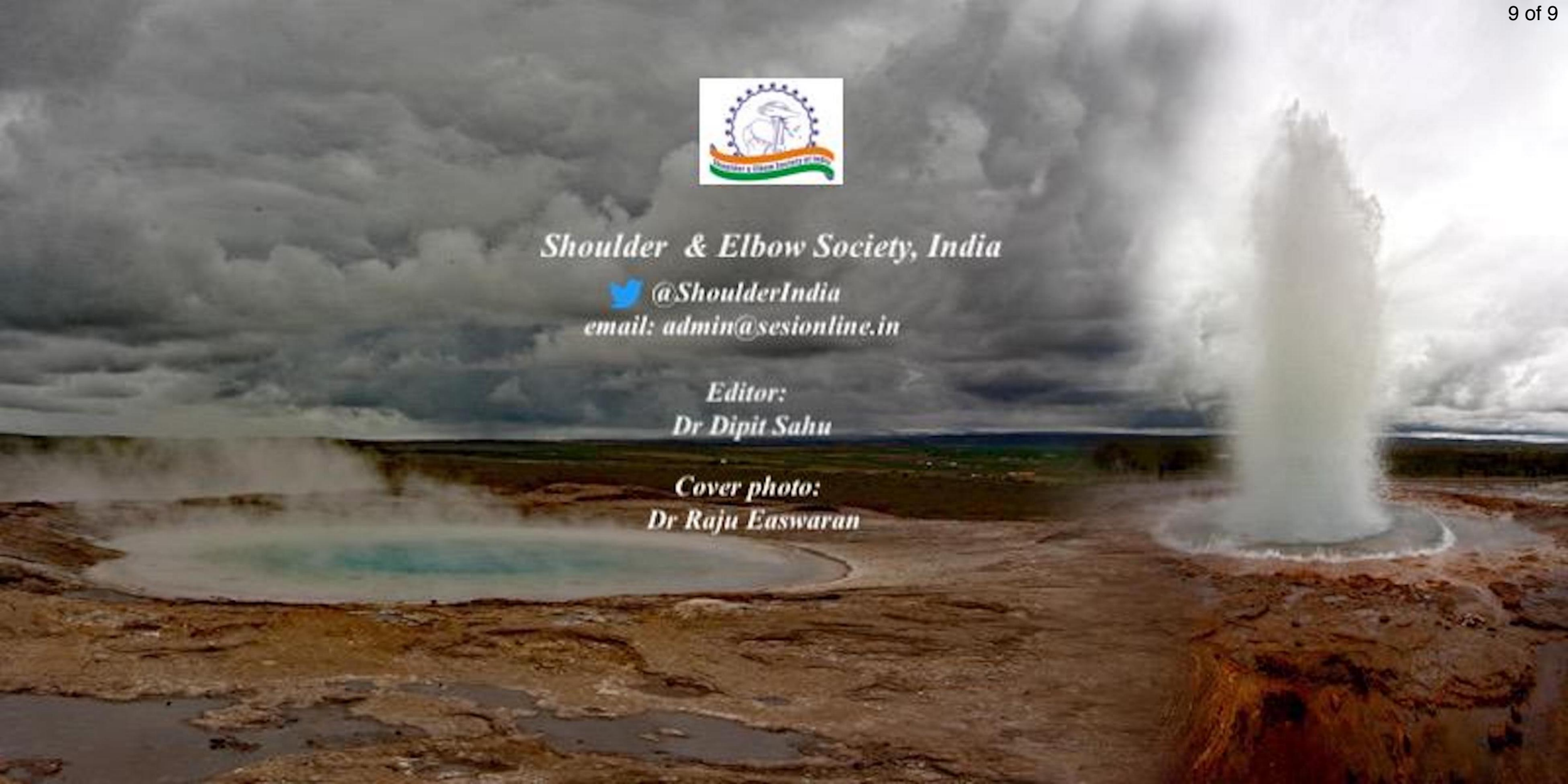
I finally had to raise my hands and agree to undergo a discectomy despite my efforts to avoid it.

To my bad luck, I had a rare intraoperative complication and needed six weeks to come back even to work.

On the positive side, it's probably only because of our entire team that I made it through this mortal complication, with my family as strong support standing by me through my recovery and rehab. This setback did not affect my strong will to get back to my fitness. Today as I write this article, I have already completed a half marathon within five months of my surgery. I have started enjoying the tiny little things in life much more than I used to. I have become a much calmer & happier person than I used to be. So not all setbacks are bad but handling them well is essential that eventually makes you a stronger & a better person.

Running is not just a sport or fitness
Running is your Adrenaline
Running is your happiness

Dr SR Sundararajan,
Arthroscopy surgeon,
Ganga Hospital,
Coimbatore .



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