

Rotator Cuff Tear and its Challenges

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TOPIC HIGHLIGHT

Over a century after Codman's description of Open rotator cuff repair and close to almost half a century after Neer enhanced the repair with a acromioplasty, we remain at crossroads on several aspects about rotator cuff repair. We still lack consensus and uniformity on issues ranging from acromioplasty, Single VS double row repairs, early or late rehab, Steroid injections utility before or after surgery,

surgery for asymptomatic cuff tears, Surgery above 70 years age, Arthroscopy for partial cuff tears, grafts (either Xeno, allo or auto grafts) for irreparable cuff tears, Co-morbid factors such as smoking, obesity, Diabetes nor the use of sling, abduction pillow or brace or infusion catheters. Arthroscopic cuff repair is arguably the gold standard across the globe, with improved suture anchors, simplified instruments, better anesthesia, precision pumps and RF devices has led to a consistent, improved and lasting result.

The repair of a torn rotator cuff itself is mired in controversy^[1] and we continue to debate on the benefit of surgical repair. The only consensus that eludes debate, is the agreement that a rotator cuff does not heal primarily. The surgeon needs to be kept abreast about the nuances of single VS double row repair and its appropriate application. Both these versions will be detailed by Amol Tambe and Nobuyuki Yamamoto and will clarify all aspects of single and double row repairs. Digressing from the conventional rotator cuff repair technique, we are introducing a novel non-implant transosseous repair of rotator cuff. In this globalised world, it is our virtuous task to bring to the world, viable and unique aspects of treatment such as the TOE repair by Shigehito Kuroda. There is never an absolute in medicine and hence there cannot be a single surgical technique for all varieties of rotator cuff tears. Age also provokes a debate on whether it is worth performing an arthroscopic repair in senior citizen over 70 years. Many nations tend to offer a Reverse shoulder arthroplasty for patients above 70^[2]. We will review on the success rate of Arthroscopic rotator cuff repair in the senior citizen. The treatment of partial cuff tears implores even more controversy than the management of full thickness tears. Paradoxically, partial cuff tears are more painful and stiff than full thickness cuff tears. Hence they demand and warrant more attention and thereby better consensus in treating partial cuff tears^[3,4]. Greg Hoy and his team will cover the surgical management of partial cuff tear.

The subscapularis which forms a critical unit of the rotator cuff has been debated less intensely. Perhaps that is because it arrived a little late on the scene and the debate on rotator cuff has still not satiated the disputants. Personally, I believe the subscap often defies clinical detection, grade I-II tears are not always easily detected on USG or MRI and can be missed surgically - especially with mini open technique, performed without a diagnostic arthroscopy. Hence Jae Chul Yoo, an authority on subscapularis will elaborate on techniques of repair of subscapularis^[5].

That leaves the area of massive and irreparable rotator cuff tears.

Not only are the massive tears difficult to repair, unreliable on outcome and there is always a propensity to re-tear. We would like to cover the entire spectrum of management of massive tears from primary repairs by Bancha Cherunchujit and Lat dorsi transfers by Jean Kany who is an expert and has extensive experience on Lat dorsi transfers^[6]. Beyond the feasibility of repairs, the surgeon always grapples to choose between Lat dorsi transfer, Synthetic graft and superior capsule reconstruction. The indications for each of these are identical. Comprehensively these contemporary techniques will be described by Jean Kany, Amit Modi & Jose Carlos Garcia Jr respectively. The last remaining bastion for irreparable cuff tears is the reliable and lasting solution is reverse shoulder arthroplasty. Reverse shoulder arthroplasty is unarguably a lasting solution for cuff tear arthropathy. Can we offer a Reverse shoulder arthroplasty in irreparable cuff tears without arthritis^[2]? This remains an extended indication, nonetheless a universal one. Didier Oudet will elucidate on Reverse shoulder arthroplasty in an exclusive indication of irreparable cuff tears without arthritis.

With the goalposts shifting progressively, it is vital for the surgeon to empower himself with evolving technologies and at the same time evaluate the appropriateness of the procedure. Each rotator cuff tear is distinct and each patient is an individual. Hence it is recommended that the surgeon achieve a bespoke approach for that particular patient. A rotator cuff tear is not a simple open and shut case and we ought to keep our mind open to each of the above options. Till we have comprehensive information, that is tested by time and

peer review, rotator cuff management will remain an inexact and demanding science.

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