Introduction: The pectoralis major is a very powerful muscle that forms the chest prominence and it moves the shoulder forward and across your chest. It is best known as the muscle that you develop with the bench press exercise in gymnasium. The pectoralis major attaches to the humerus bone and is divided into two parts. The upper part is known as the “clavicular head” and the lower part the “sternal head,” based on their origins from the clavicle and sternal bones, respectively. Ruptures of the pectoralis major muscle are becoming more common due to the increase in power sports weight training.

Case Report: A 25-year-old male presented to Out Patient Department with bruising and swelling over the anterior wall of left axilla. The patient was engineer and amateur weight lifter. Clinically, the swelling was tender, and movements of left arm were restricted. Muscle tear was suspected and hence magnetic resonance imaging (MRI) was advised which showed tear of tendon of pectoralis major muscle. The patient was treated surgically and has got full range of movements of the arm.

Conclusion: MRI is the mainstay for diagnosing pectoralis major tear. The earlier a repair is performed the easier the surgery and the better the outcome of surgery.

Keywords: Pectoralis major, tear, weight lifting.
treated surgically by taking osseous sutures and reattaching the tendon to humerus. The arm was immobilized for 2 weeks. Active elbow and wrist exercises were started as soon as pain subsided. At 2 months follow-up patient had full range of movements (Fig. 3).

Discussion

The pectoralis major muscle is the large muscle in front of the chest wall. There are two parts of the pectoralis muscle, the pectoralis major, and the pectoralis minor. The pectoralis major is the larger of the two and works to push the arms in front of the body, such as in a bench press exercise. Although ruptures remain rare, the injury has become more prevalent in the past 30 years as the numbers of both recreational and professional athletes have increased.

These injuries generally occur during forceful activities. Almost half of all pectoralis major ruptures occur during weightlifting, particularly during a bench press maneuver. It is known that steroid use can weaken the tendon, and this is thought to be a contributing factor in many pectoralis major muscle ruptures. However, these injuries can certainly occur in patients who have never used steroids [4].

The mechanism of injury of a pectoralis major rupture is either due to direct injury or indirect trauma due to extreme muscle tension or a combination of both. Several studies have reported an increased incidence of injuries because of excessive muscle tension rather than direct trauma [5, 6, 7, 8].

The technique for surgical repair varies from suturing the tendon to the periosteum [9], to the remaining tendon [7] or clavi-pectoral fascia [10]. Osseous fixation can be achieved through drill holes [9, 11, 12] barbed staples [13] and anchors [14].

Early surgical repair of distal pectoralis major tendon ruptures and an accelerated rehabilitation protocol provide reliable restoration of shoulder function and strength, allowing an early return to sports and functional activity. Outcomes after early primary repair have generally been superior to those of delayed repair [5, 15].

Conclusion

We believe MRI scanning is important in accurately determining the severity and the site of injury, which aids preoperative planning. The earlier a repair is performed the easier the surgery and the better the outcome of surgery.

Clinical Message

Weight lifters should be instructed on proper bench press technique. The most important considerations are to limit the distance the bar is lowered and to narrow the grip of the hands to the bar. Lowering the bar all the way to the chest, or widening the grip on the bar, increases the stress on the muscle and increases the chance of a pectoralis injury.
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