
Abstract:
Assessment of repair integrity and clinical outcome after arthroscopic repair of rotator cuff tears in double-row suture-bridge technique with the use of a new knotless suture-anchor system. The first treated 25 patients with arthroscopic rotator cuff repair in the suture-bridge technique using a novel knotless anchor and chain-link suture system were evaluated. Patients with isolated full-thickness supraspinatus tears were selected. They were followed clinically with functional scores (Constant score, ASES index), visual analog scale (VAS), and instrumentally with Isobex digital strength analyzer preoperatively, at 6 and 14 months postoperatively. The repair integrity was evaluated with MRI at an average of 14 months postoperatively. Significant improvement of pain, strength, range of motion, and functional scores occurred (P< 0.05). There was a re-tear rate of 20%. The subjective parameters (VAS and ASES Index) showed non-significant (n.s.) differences between the re-tear and intact repair groups, whereas the objective parameters (Constant score, muscle power and active ROM) showed significant differences between both groups (P< 0.05). The functional outcome has improved significantly with this new knotless anchor-chain system and was more superior in shoulders with intact repair, whereas the resulted repair integrity was not better than other types of
double-row repair techniques mentioned in the recent literature. However, this early report of the novel technique may show limited power for comparison due to the relatively small sample size.