The Effects of Arthroscopic Rotator Cuff Repair on Human Sexual Activity.

Dr.Tarek Ghandour
Professor of Orthopaedics.
Ain Shams University-Egypt.

ISAKOS CONGRESS 2025 | MUNICH GERMANY June 8–11

Disclosure

- This work has not received any funding..

Background:

- Sexual activity is an essential part of our life, and sexual satisfaction affects the quality of it. A sexual dysfunction is believed to be strongly associated with emotional and physical dissatisfaction and even depression.
- Sexual intercourse is recognized as a form of physical activity which involves physical movement and puts the body joints under stress.
- Rotator cuff tear is a common condition affecting patients' performance and quality of life Unlike hip and knee surgery, the effect of rotator cuff tear and its repair on sexual life is seldom reported in the literature.
- We hypothesized that arthroscopic rotator cuff repair will improve sexual life as it will decrease the pain during sexual intercourse.

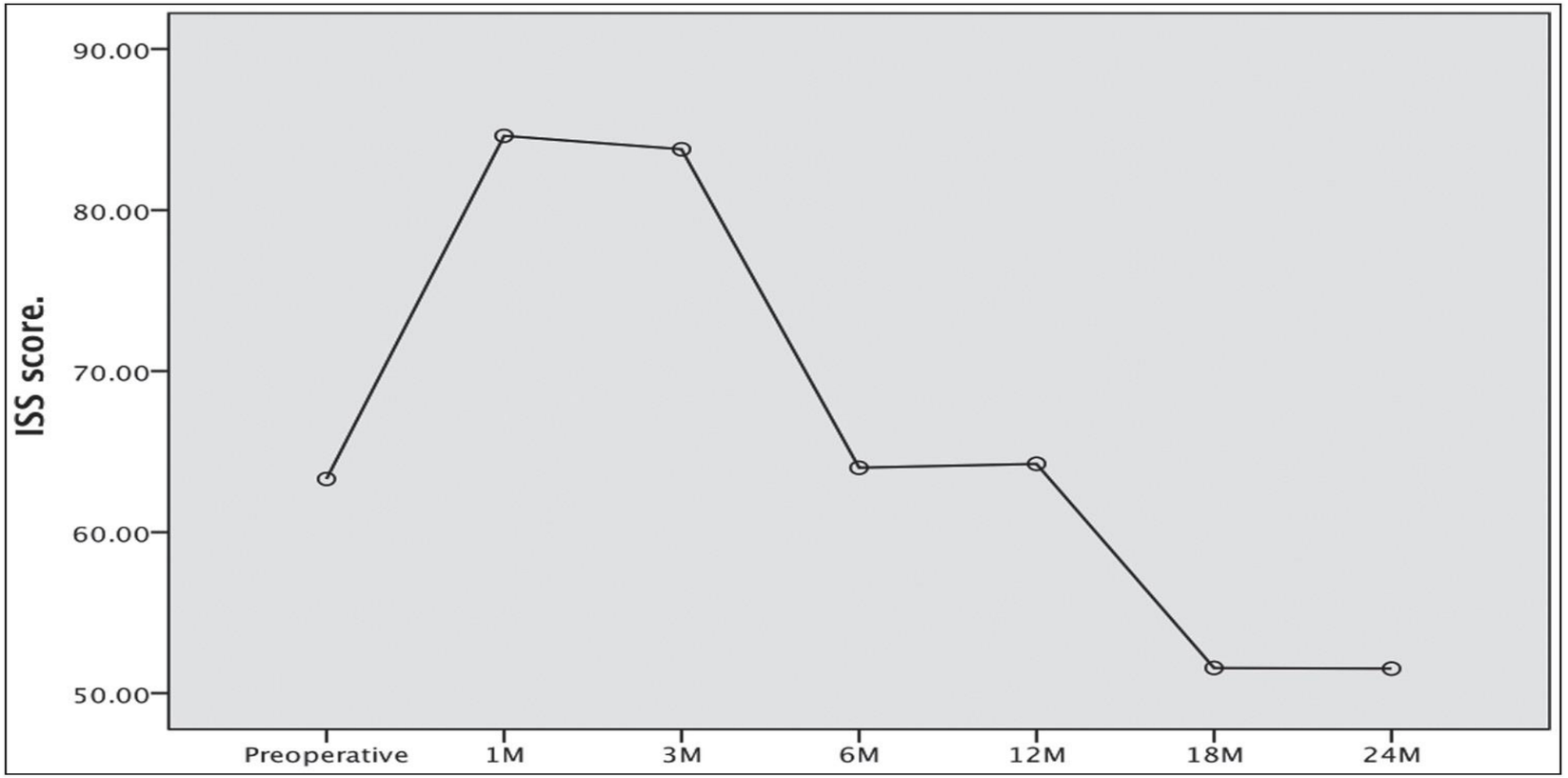
Materials and Methods:

- We did arthroscopic rotator cuff repair for 55 sexually active married individuals with rotator cuff tears.
- Shoulder and Sexual function were assessed using:
  - 1- The Constant-Murley score (CMS), to evaluate pain level during daily activities .
  - 2- Visual analog scales (VAS) questionnaires, to assess the pain level only during sexual activity.
  - 3- Change in Sexual Functioning Questionnaire (CSFQ).
  - 4- Sexual Desire Inventory (SDI) Questionnaire.
  - 5- The Index of Sexual Satisfaction (ISS) Questionnaire.
  - 6- The study-specific short questionnaires.
- Assessment parameters were done before surgery and at 1 month (1M), 3 months (3M), 6 months (6M), 12 months (12M), 18 months (18M), and 24 months (24M) after surgery.

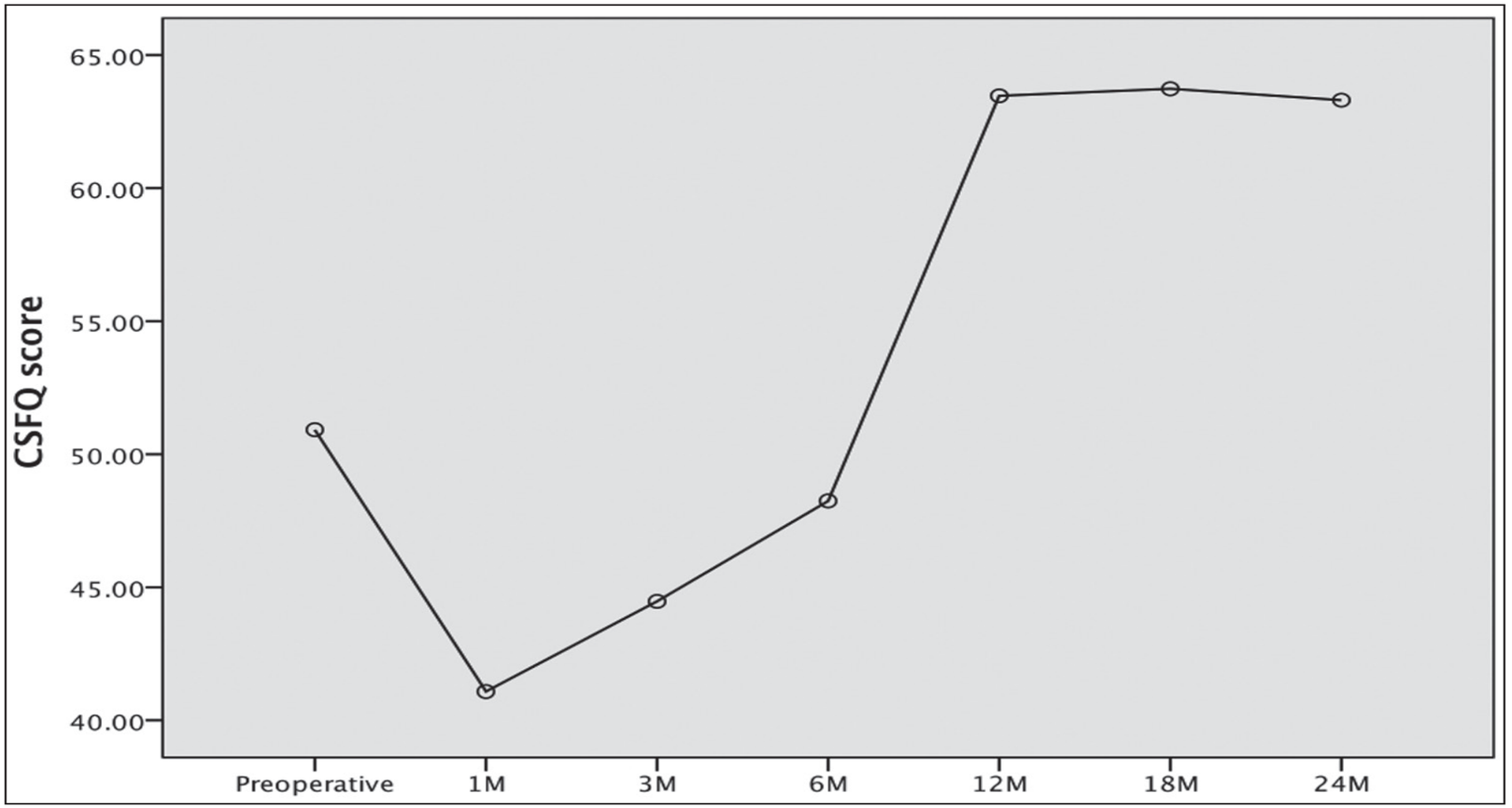
Results:

- Only 49 subjects were included in the final analysis (6 were excluded from the last follow-up).
- 77% of the study subjects found that their sexual life was affected by their shoulder condition, with 65% reporting that this was due to increased pain.
- 75% needed to adjust their sexual position to accommodate their shoulder problem.
- 55% found that below the partner position is the most comfortable position during the sexual act.
- Additionally, we found a significant improvement over time in the CMS score, two VAS questionnaires, CSFQ, and ISS.

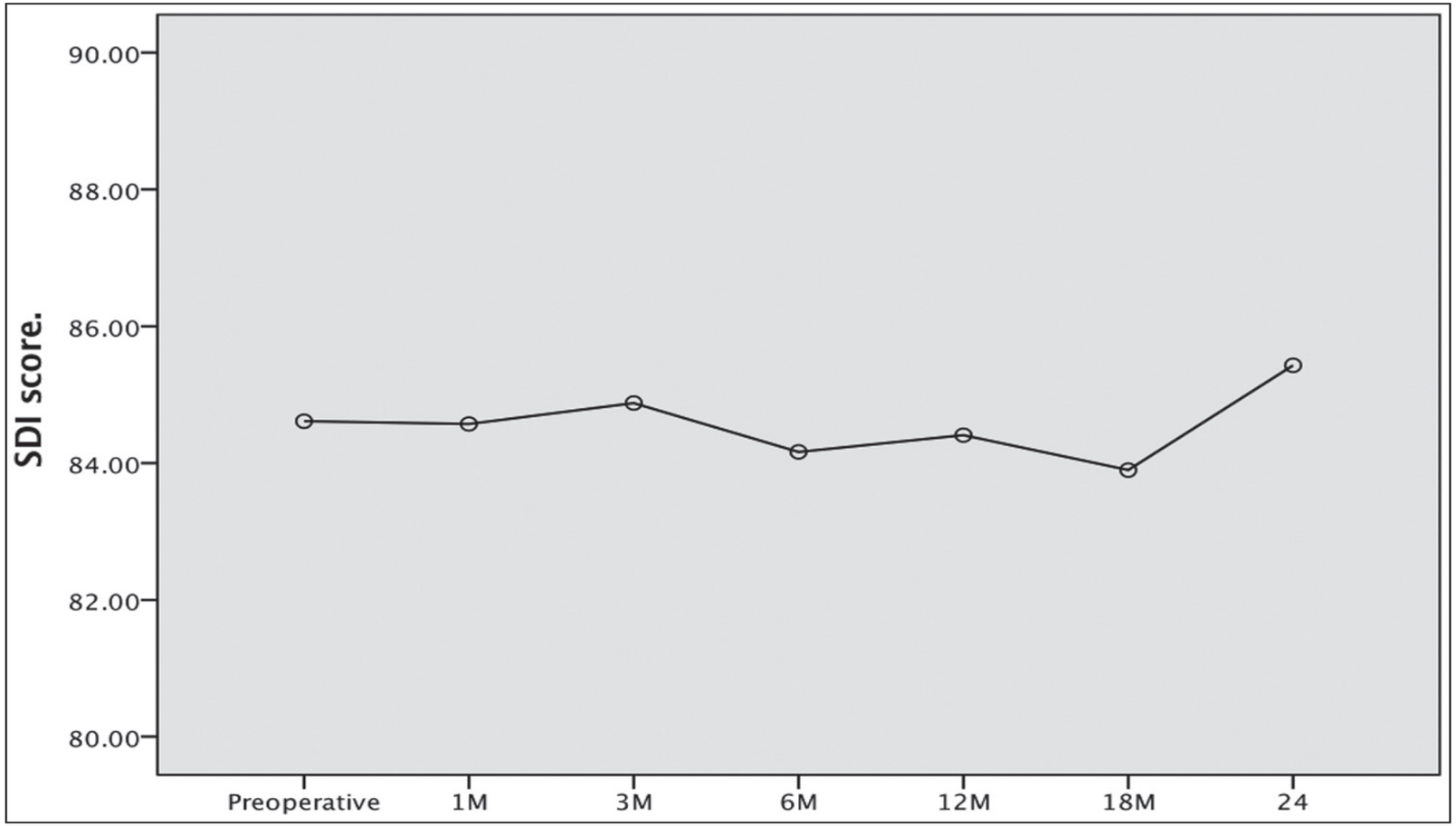
Results



- Changes in the Sexual Satisfaction (ISS) over the follow-up phase: Pre (Preoperative), 1 M (1 month postoperative), 3 M (3 months postoperative, 6 M (6 months postoperative), 12 M (12 months postoperative), 18 M (18 months postoperative), 24 M (24 months postoperative).



Changes in the Change in Sexual Functioning Questionnaire (CSFQ) over the follow-up phase: Pre (Preoperative), 1 M (1 month postoperative), 3 M (3 months postoperative, 6 M (6 months postoperative), 12 M (12 months postoperative), 18 M (18 months postoperative), 24 M (24 months postoperative).



Changes in the Sexual Desire Inventory (SDI) over the followup phase: Pre (Preoperative), 1 M (1 month postoperative), 3 M (3 months postoperative, 6 M (6 months postoperative), 12 M (12 months postoperative), 18 M (18 months postoperative), 24 M (24 months postoperative).

Discussion.

- We assessed the sexual function using scoring systems with proven reliability and validity in addition to the study-specific questionnaires rather than relying solely on the study-specific questionnaires.
- In this study, shoulder function, represented by the CMS, and sexual function, defined by CSFQ, improved throughout the follow-up phase. After 1 year of follow-up, a plateau phase was reached, after which improvements in the shoulder and sexual function were not significant.
- We noticed improvements in pain, represented by the two VAS questionnaires, and sexual satisfaction, represented by the ISS score. This improvement continued until 18 months of follow-up, and there were no significant improvements afterward.

Discussion

- Regarding sexual position, 75% (37 of 49) reported that they needed to adjust their position during sexual encounters, with being below the partner being more comfortable in 55% (25 of 49). This was similar to Nugent *et al*. study, where 40% of their test subjects comfortably engaged in sexual activity while being below their partner.
- Only 48% (24 of 49) were sexually active in the first month postoperatively, while all test subjects were sexually active at the three-month follow-up visit. This result was similar to Nugent *et al*. results, who noticed that 72% of their study group resumed sexual activity by six weeks.
- Sixty-five percent of the sexually active participants (57 of 88) reported that their shoulder condition affected the quality and frequency of their sexual activity; 79% of these subjects said their sexual activity became much easier after the operation.

Limitations:

- The study design did not include a control group, so the study lacked the element of comparison.
- We considered age and sex as confounders, we believe that males and females have different types of physical activity during sexual engagement and would respond differently to surgery, an aspect that should be investigated thoroughly.
- We had only included subjects within a specific age group; as a result, our assumption cannot be applied to patients outside this age group.
- We did not investigate the effect of sexual positions on the outcome of our patients; we believe that further research is needed to assess the impact of different sexual positions on sexual function, satisfaction, and pain after rotator cuff repair.
- Most of the data were collected using questionnaires that depend on the subjects' subjective feelings, which might have increased the risk of bias.

Conclusion:

- Arthroscopic rotator cuff repair improved shoulder function, pain level, sexual function, satisfaction, and improved mobility during sexual engagements. However, it did not affect the level of sexual desire after two years of follow-up.

REFERENCES:

- **1** Oliva-Lozano JM, Alacid F, López-Miñarro PA, Muyor JM. What are the physical demands of sexual intercourse? a systematic review of the literature. Arch Sex Behav 2022; 51:1397–1417. doi:10.1007/s10508-021-02246-8
- **2** Grover S Assessment Scales for Sexual Disorders: A Review. 2020. doi:10.1177/2631831820919581
- **3** Nunley RM, Nam D, Bashyal RK, Parvizi J, Della Valle CJ, Hamilton WG, *et al*. The impact of total joint arthroplasty on sexual function in young, active patients. J Arthroplasty 2015; 30:335–340. doi:10.1016/j.arth.2014.09.029
- **4** Meiri R, Rosenbaum TY, Kalichman L. Sexual function before and after total hip replacement. Sex Med 2014; 2:159–167. doi:10.1002/sm2.35
- **5** Harmsen RTE, Haanstra TM, Den Oudsten BL, Putter H, Elzevier HW, Gademan MGJ, *et al*. A high proportion of patients have unfulfilled sexual expectations after TKA: a prospective study. Clin Orthop Relat Res 2020;
- 478:2004–2016. doi:10.1097/CORR.0000000000001003
- **6** Yue BWD, Xing B. Quality of sexual life after total hip arthroplasty in male patients with osteonecrosis of femoral head. 2014. doi:10.1007/ s00590-014-1432-1
- **7** Nugent RE, Cheesman QT, Bradian AK, Austin LS. Improvements in sexual function following arthroscopic rotator cuff repair. J Shoulder Elb Surg 2020;30:1–6. doi:10.1016/j.jse.2020.06.017
- **8** Ther C-JSM, Keller A. Reliability and Construct validity of the. 2006;(January):43-52. doi:10.1080/00926230500232909
- **9** Spector IP, Carey MP, Steinberg L. The sexual desire inventory: Development, factor structure, and The Sexual Desire Inventory: Development, Factor Structure, and Evidence of Reliability. 2013:37-41.
- **10** Hudson WW, Harrison DF, Crosscup PC. A short-form scale to measure sexual discord in dyadic relationships. 2012:37-41.
- **11** Louwerens JKG, van den Bekerom MPJ, van Royen BJ, Eygendaal D, van Noort A, Sierevelt IN. Quantifying the minimal and substantial clinical benefit of the Constant-Murley score and the Disabilities of the Arm, Shoulder and Hand score in patients with calcific tendinitis of the rotator cuff. JSES Int 2020; 4:606–611. doi:10.1016/j.jseint.2020.05.001