



Psychotropic Drugs and Shoulder Scopes: A Retrospective Chart Review

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Introduction

- Arthroscopic and minimally invasive surgical procedures are growing in utility and popularity due to decreased complication rates, shortened hospital stays, and reduced recovery time.¹
- it is estimated that 20% of adults in the U.S. are taking at least one psychotropic medication.² Thus, patients who undergo arthroscopic procedures while taking these medications is increasing.
- Although the effects of psychosocial determinants on patient dysfunction and pain have previously been studied, there are no studies in shoulder surgery that have specifically evaluated if the use of psychotropic medications impacts patient outcomes.
- The purpose of this study is to determine the prevalence of psychotropic medication use in patients undergoing shoulder arthroscopy. Further, we seek to compare the outcomes of patients taking psychotropic medications versus those of patients not, and how demographic factors may impact outcomes.

Methods

- A retrospective computerized chart review was conducted using the billing database at a single institution. Charts from patients treated by three fellowship trained Orthopaedic surgeons between 2019-2021 were included.
- All shoulder arthroscopy patients older than twelve with a minimum of six months follow up were included.
- Demographic variables were collected for age, sex, surgery side, body mass index, and use of psychotropic medications:
 - 1) antidepressants: Fluoxetine, Bupropion, Escitalopram
 - 2) antipsychotics: Clozapine, Risperidone, Olanzapine
 - 3) Stimulants: Amphetamine/dextroamphetamine salts, Dextroamphetamine, Methylphenidate
 - 4) anti-anxiety medications: Lorazepam, Alprazolam
 - 5) mood stabilizers: Lithium, Carbamazepine, Lamotrigine.
- Psychotropic medications were included if they were listed as 'taking' in the patient's chart at least 6 months prior to surgery.

Results

Figure 1. Psychotropic Drug Utilization by Class

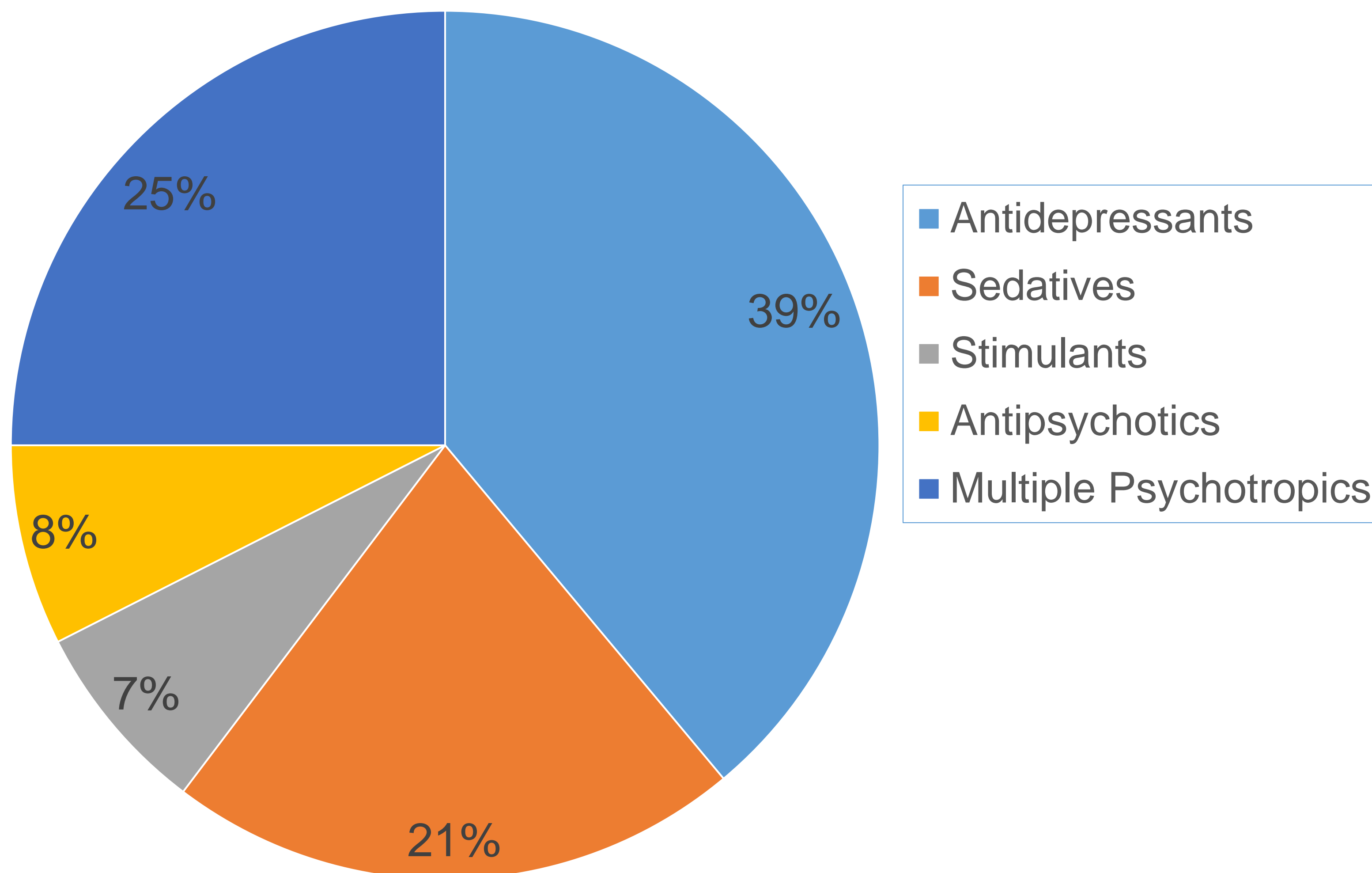
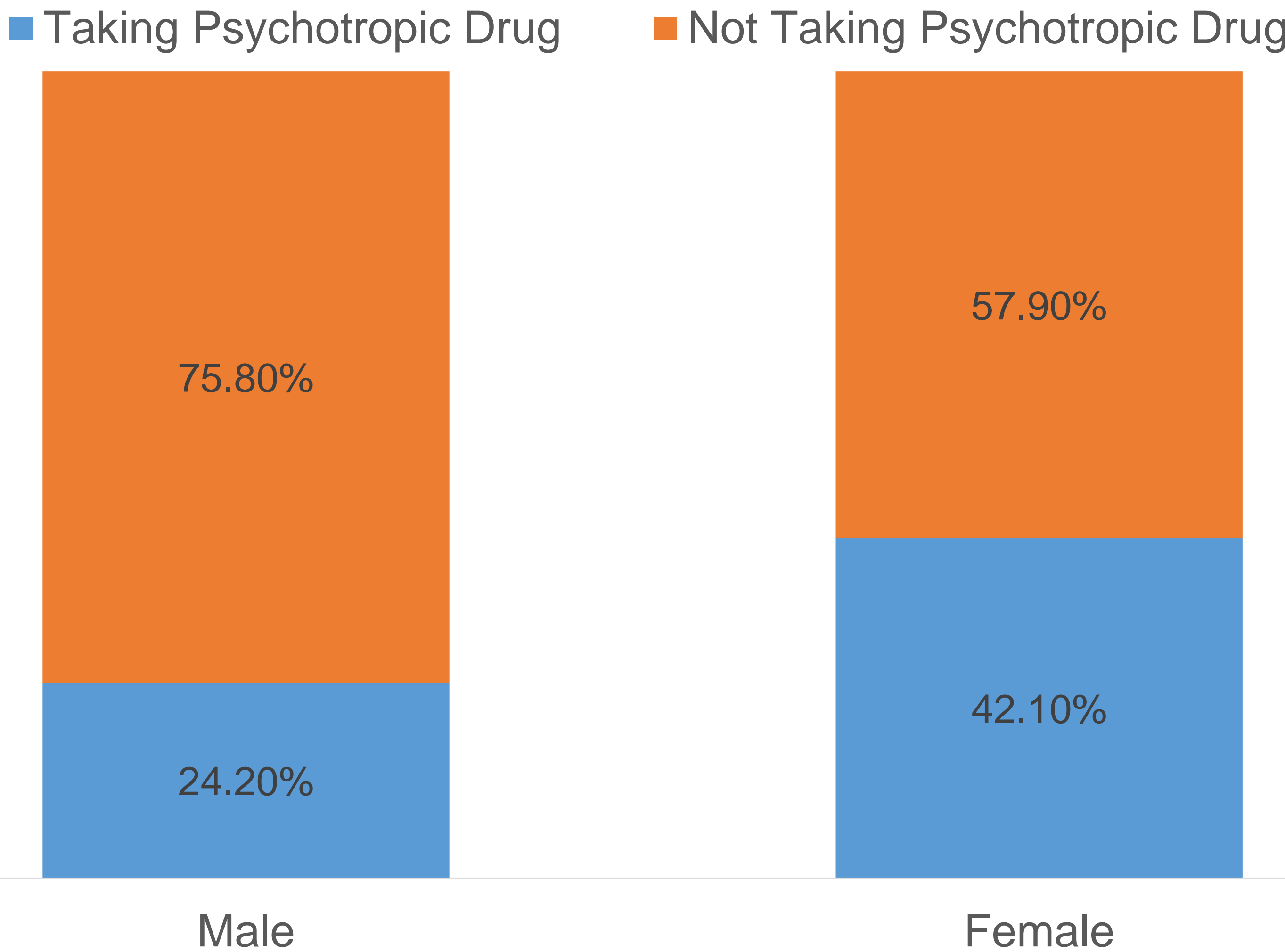


Figure 2. Male vs Female Utilization of Psychotropic Medication



Results

- In 2021, 450 patients underwent arthroscopic procedures for shoulder pathology, 153 (34%) involved a patient who was prescribed at least one psychotropic drug.
- In 2020, 400 patients underwent arthroscopy and 120 (30%) of patients were prescribed at least one psychotropic drug.
- The percentage of patients who were prescribed at least one psychotropic drug in 2019 was higher at 171 (40%) of the 428 total patients.
- Of the 1,278 patient charts that have been reviewed, 447 (34.9%) were prescribed at least one psychotropic drug.
- Of the 826 males, 24.2% were prescribed psychotropic drugs compared to 42.1% of the 447 females.
- Categorically:
 - 38.92% were from the drug class antidepressants
 - 21.39% mood stabilizers
 - 7.22% stimulants
 - 7.47% antipsychotics
 - 25.00% multiple psychotropics

Conclusion

- A large portion of patients undergoing arthroscopic procedures of the shoulder are concomitantly taking psychotropic medication.
- While both sexes are taking psychotropic medications, female patients have significantly higher utilization.
- Previous research shows that patients taking psychotropic medication while undergoing hip arthroscopy have worse outcomes than patients not taking psychotropic medication.² Thus, further investigating the relationship between psychotropic drugs and arthroscopic procedure outcomes is warranted in the context of the shoulder.

References

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