# Can local anesthesia be considered as gold standard in knee arthroscopy?





Tilemachos C Papageorgiou MD, Stefanos C Papageorgiou MD, Ilias T Sotiriadis MD, Tsoumanis C Dimitrios MD, Christos D. Papageorgiou, MD, PhD, Orthopaedic Clinic of University Hospital Ioannina Greece

# FACULTY DISCLOSURE

# NO FINANCIAL DISCLOSURE



# Introduction

• Knee arthroscopy:

Can be used to treat a wide range of knee injuries or as a diagnostic method

Most common type of anesthesia

Spinal
(SA)
General
(GA)

Little data on local anesthesia (LA)

The aim of our study: Efficacy of LA in knee arthroscopy.

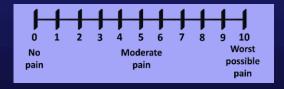






#### Methods

- We performed a retrospective analysis of the efficacy of local anesthesia in patients undergoing knee arthroscopy over a period of 8 years.
- The anesthetic routinely used was:
- 1) Xylocaine spray 10mg/dose for surface anesthesia.
- 2) Ropivacaine 10mg/ml intra-articular
- 3) Xylocaine 2% percutaneously at the portal site
- 4) Diazepam iv in low doses (5mg) may be injected for muscle relaxation and BP control
- Evaluation of pain was made using **VAS score** during injection and during procedure.













#### Results

- 522 patients during 01/2014 06/2022 have been performed under LA
- ➤ Gender distribution: 69,3% males-30,7% females
- Mean age: 50,26yo (r.16-79yo)
- Types of procedures underwent:
  - 1) Meniscus surgery (76%)
  - 2) Debridement (13%)
  - 3) Loose bodies removal
  - 4) Chondroplasty
  - 5) Plica Syndrome
  - 6) Lateral release-medial plication
  - 7) Removal of soft tissue abnormalities





# Results

VAS measured in n=259	
During injection	During procedure
1.6 (SD 2)	0.8(SD 1.7)

- We have not encountered any type 1 allergic reaction
- There were no side effects during related to the injection
- Two procedures were postponed due to local anesthesia failure \( \bigcirc \text{1 technical mistake} \) 1 anxiety of patient



# Results

Benefits of LA that led us use it in our clinical routine during knee arthroscopy:

- Shorter hospitalization than SA or LA
  - Less stress of the body
    - Cost-effective









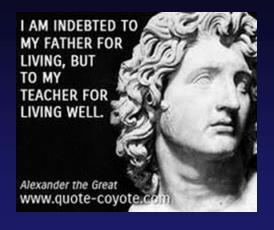
# Conclusions

• Our experience demonstrates that LA in arthroscopies is a convincing alternative to other forms of anesthesia and should further be considered as gold standard anesthesia in knee arthroscopy









# THANK YOU





