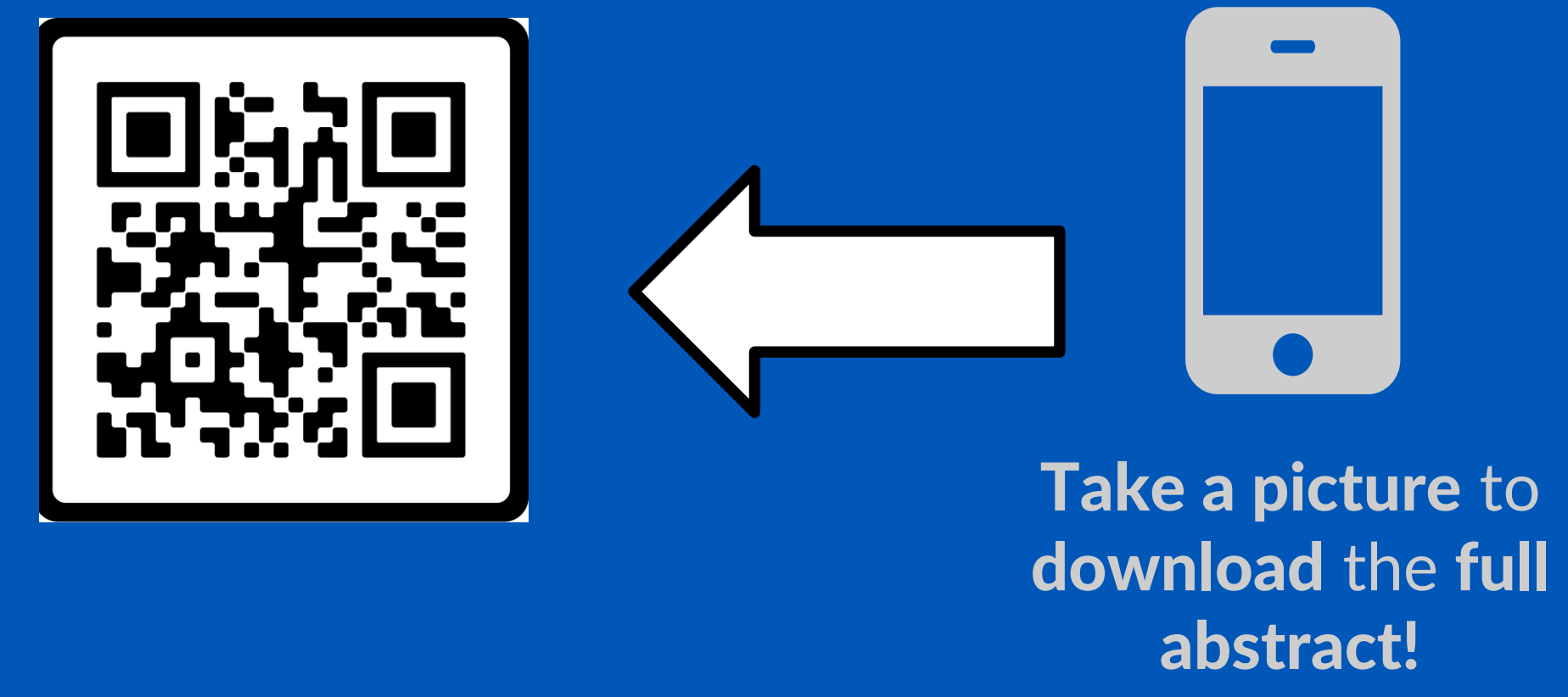




Regional Anesthesia does not increase the risk of neurological complications or nerve injury in patients with Multiple Sclerosis

Regional Anesthesia in Patients with Multiple Sclerosis

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BACKGROUND

- Use of peripheral regional anesthesia for patients with MS is controversial
- No consensus exists from the American Society of Regional Anesthesia

OBJECTIVES

Qualify the risk of complications of regional anesthesia in patients with MS: new onset nerve injury, exacerbation or progression of MS, Vascular injury, intravascular injection, local anesthetic systemic toxicity

METHODS

- Historical cohort study of patients 18 years of age and older who received regional anesthesia from April 01, 2012 to April 12, 2022 across the Mayo Clinic enterprise
- EMR reviewed for demographics, type of regional anesthetic performed, perioperative variables, evidence of neurological complications, post procedural neurology consultations, and perioperative EMG results

RESULTS

- 533 patients with MS were identified as having undergone regional anesthesia
- 81.2% female, 18.8% male, mean age 53.4 years old.
- 65.7% had preexisting neuropathy in distribution of the block
- 21.7% underwent EMG after nerve block
- 6 patients had new neurology consultation after regional anesthesia
- No EMG study or neurology consultation attributed complications to regional anesthesia

TABLE 1: Patient Characteristics of 533 surgical patients with MS undergoing RA

Characteristic	
Female n/total N (%)	433/533 (81.25)
Age (yr) median (range)	53.4 (18.8-88.9)
BMI (kg/m ²) median (range)	30.5 (15.9-62.0)
Patients with >1 regional anesthetics	63 (6.9%)
Patients with >2 regional anesthetics	15 (1.6%)

MS= multiple sclerosis RA:=Regional Anesthesia

CONCLUSION

This study found no evidence of documented neurological complications or an increased risk of nerve injury related to regional anesthesia in MS patients

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DISCLOSURES

The authors report no relevant conflicts of interest.