

Observational study of musculoskeletal shoulder pain among patients undergoing cardiac procedure

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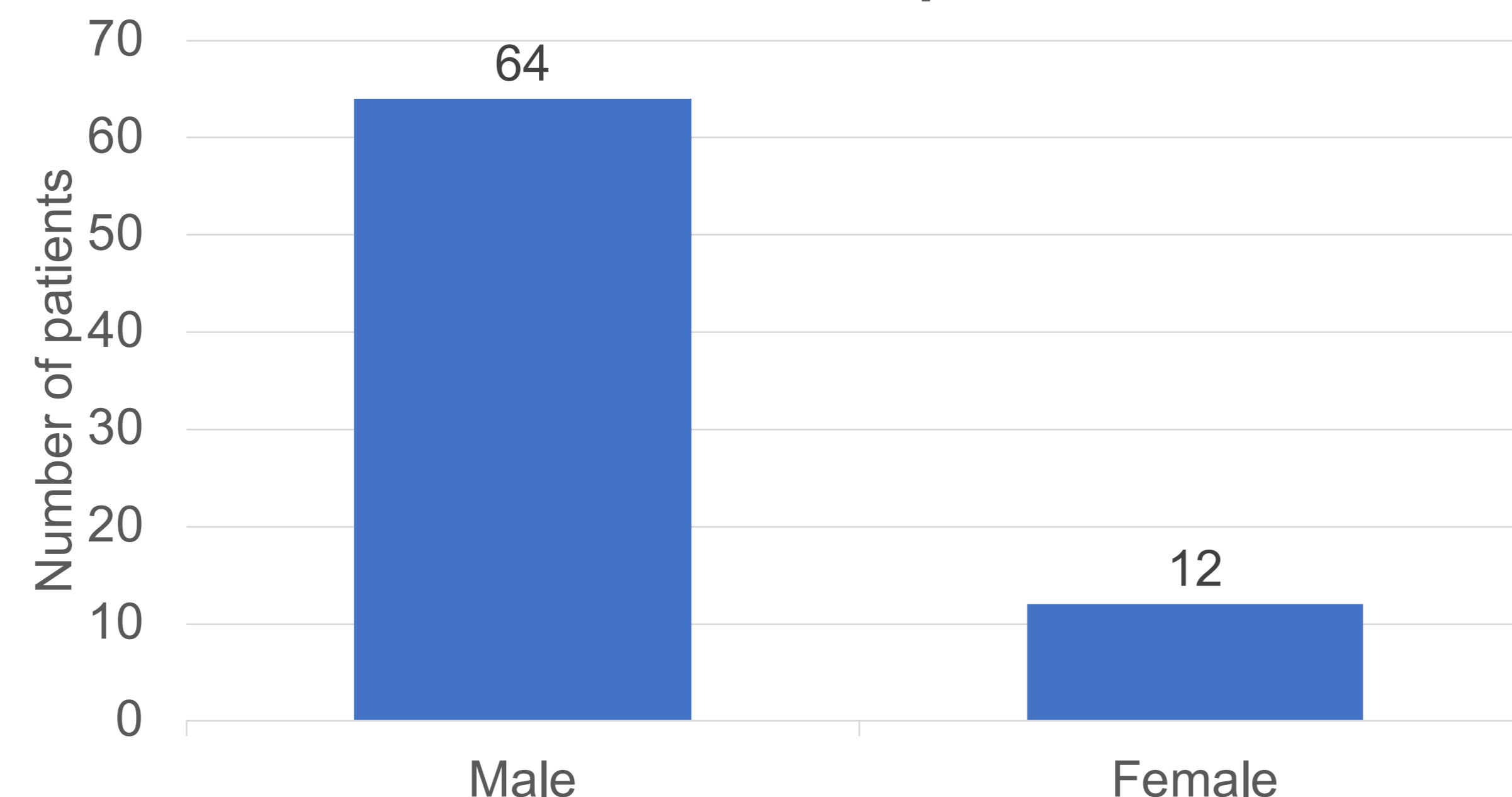
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Introduction

- ❑ Musculoskeletal shoulder pain is reported by patients following open-heart surgery (OHS)(1)
- ❑ A study found the occurrence of shoulder disorders among post-CABG patients was 36% (2)
- ❑ Pre - operative shoulder function and pain in patients undergoing cardiac procedures such as coronary artery bypass graft is poorly studied topic.
- ❑ We carried out this study with an aim to identify prevalence of pre operative musculoskeletal shoulder pain among patients undergoing elective cardiac procedure at a tertiary hospital.

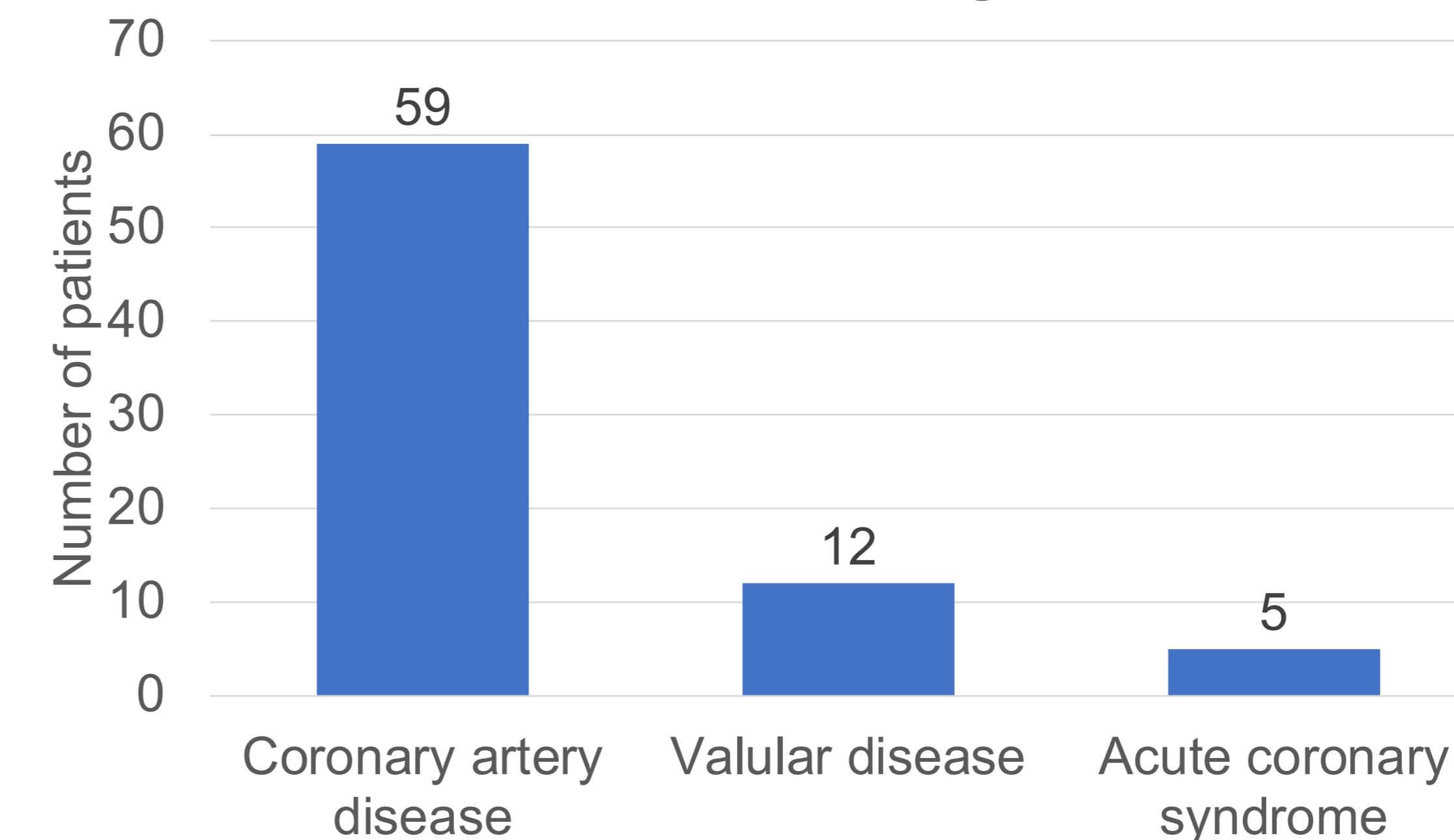
Results

Total number of patients



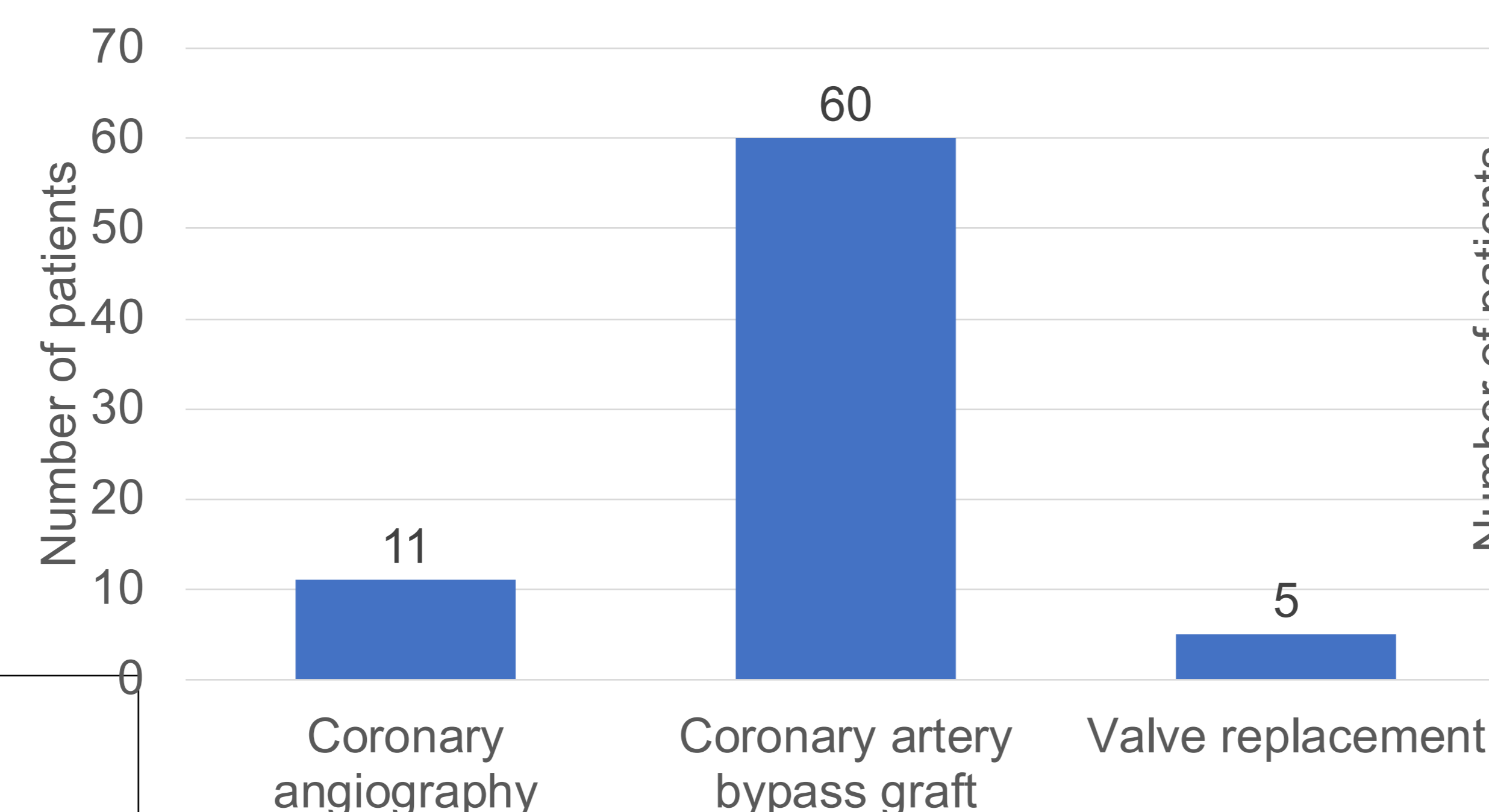
Graph 1: Number of patients

Patients' cardiac diagnosis



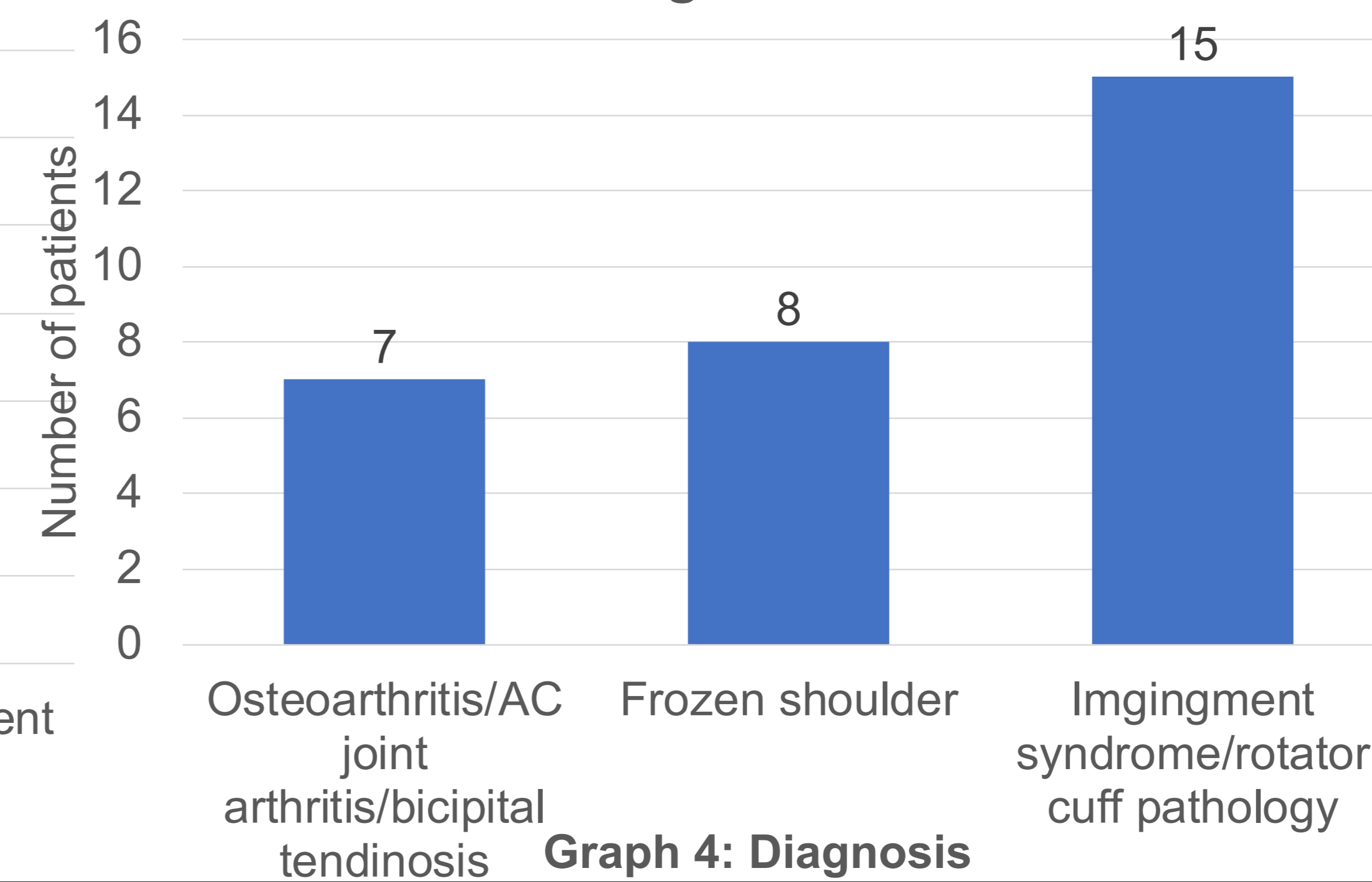
Graph 2: Patients' cardiac diagnosis

Procedure



Graph 3: Cardiac procedure

Diagnosis



Graph 4: Diagnosis

Total number of patients	76
Mean age	60 years
Symptomatic Shoulder pain	37 (49%)
Clinical shoulder pain	30 (39%)
Left sided shoulder pain	23
Right sided shoulder pain	3
Bilateral shoulder pain	11

Table 1: Number of patients

Number of diabetic patients	27
Number of diabetic patients with shoulder pain	18

Table 2: Number of diabetic patients

Method

- ❑ A cross-sectional survey was carried out from June 2019 to March 2020 period among patients undergoing elective cardiac procedure at CIMS Hospital, Ahmedabad, India after Ethics committee approval.
- ❑ The face to face survey consisted of demographics, type of procedure, shoulder pain, past medical history including any interventions and a shoulder examination by expert consultant orthopaedic surgeon with special additional interest in upper limb surgery.

Discussion and conclusion

- ❑ This study demonstrates that musculoskeletal shoulder pain is extremely common among patients undergoing a cardiac procedure.
- ❑ To our knowledge this is the first study showing that over a third of patients (table 1) due to undergo cardiac intervention procedures have pre-existing musculoskeletal shoulder pain.
- ❑ This study raises a key issue of considering a musculoskeletal cause of underlying shoulder pain among patients being assessed for underlying cardiac cause of shoulder pain.
- ❑ It may explain persistent shoulder pain in some patients after otherwise satisfactory cardiac intervention.
- ❑ This is a relatively a small size study to apply to wider patient group. Although, this promising result demonstrate need for a larger study to understand a true proportion of patients with musculoskeletal shoulder pain prior to a cardiac procedure.

References

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2. Manhal S, Sirajudeen MS, Pillai PS, Nair HR, Marla J. Occurrence of shoulder disorders among postcoronary artery bypass surgery patients in India. Arch Med Health Sci 2015;3:34-9

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