

## INTRODUCTION

The association between esophageal symptoms and high-resolution manometry (HRM) findings has not been evaluated in a safety-net hospital where patients frequently present with advanced disease.

## AIM

We aimed to compare esophageal HRM diagnoses and symptoms between this setting vs. a tertiary academic center, using patient-reported outcomes (PROs).

## METHODS

- Adults undergoing standardized esophageal HRM manometry at a safety-net (site 1) and the affiliated academic tertiary care (site 2) hospital were prospectively administered EDQ and GERDQ questionnaires in English or validated Spanish versions according to patient preference.
- HRM findings were reported per Chicago Classification V4. Patient records were reviewed to quantify symptom duration and esophageal diameter in achalasia patients.
- Multivariable logistic regression was used for the association of EDQ $\geq$ 7 with the HRM site.

CONTACT: [ashaker@usc.edu](mailto:ashaker@usc.edu)

## RESULTS

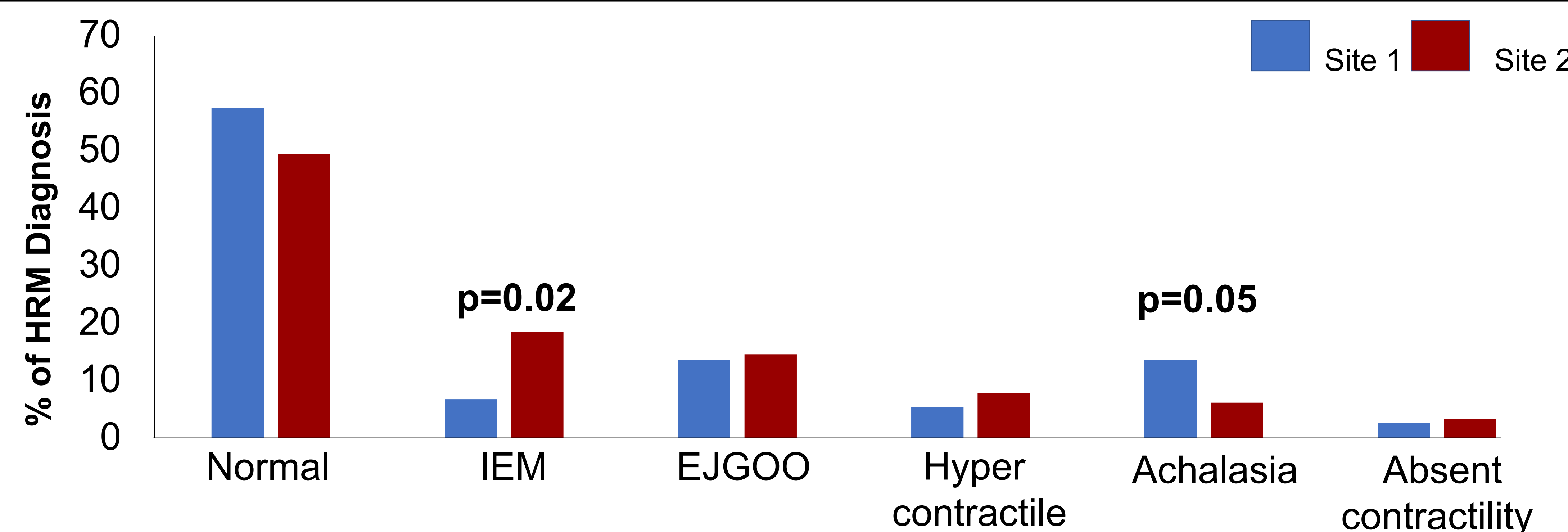


Figure 1. Percentage of each HRM diagnosis at sites 1 and 2.

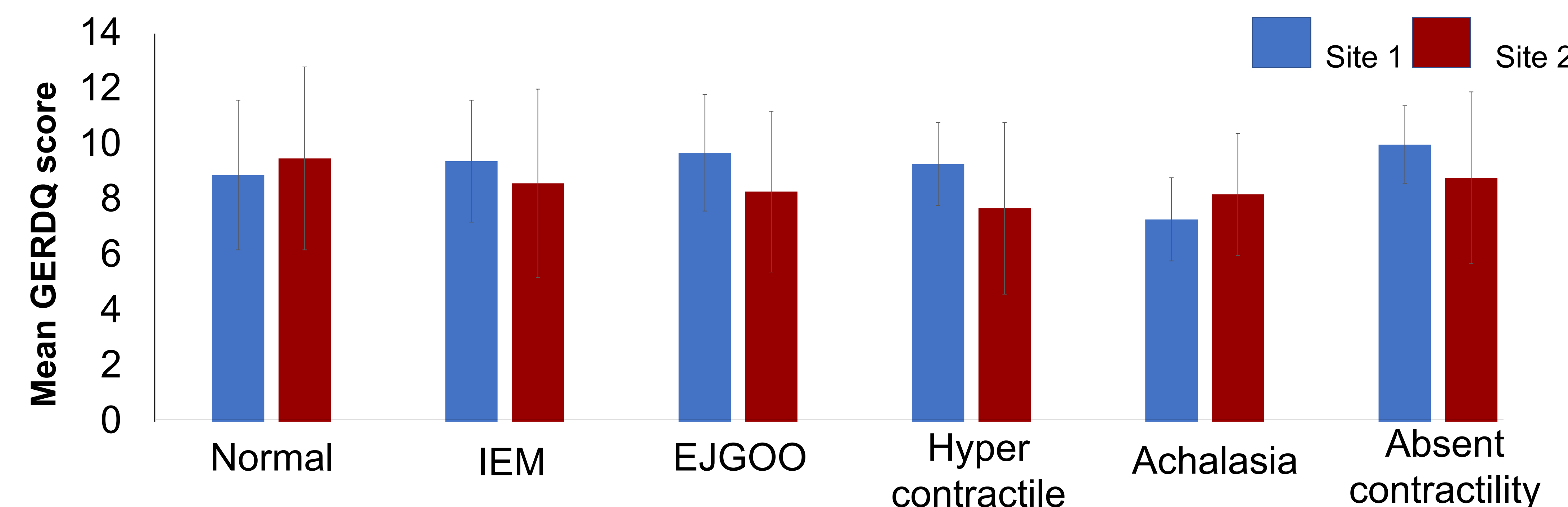


Figure 2. Mean GERDQ scores for each HRM diagnosis at sites 1 and 2.

- 73 and 178 patients were included at sites 1 and 2, respectively; at site 1, 73% of PROs were in Spanish, 27% in English; all site 2 surveys were in English.
- Ages were similar and a higher % of women had esophageal HRM at both sites.
- Among HRM diagnoses, there were site differences in the % of **IEM** (6.8% vs 18.5%,  $p=0.02$ ) and **achalasia** (13.7% and 6.2%,  $p<0.05$ ).
- Type 2 achalasia was the most frequent sub-type at both sites. For those with achalasia, symptom duration and esophageal diameter were similar at both sites.
- GERDQ scores were similar at sites 1 vs 2 (overall and for each HRM diagnosis).

## RESULTS

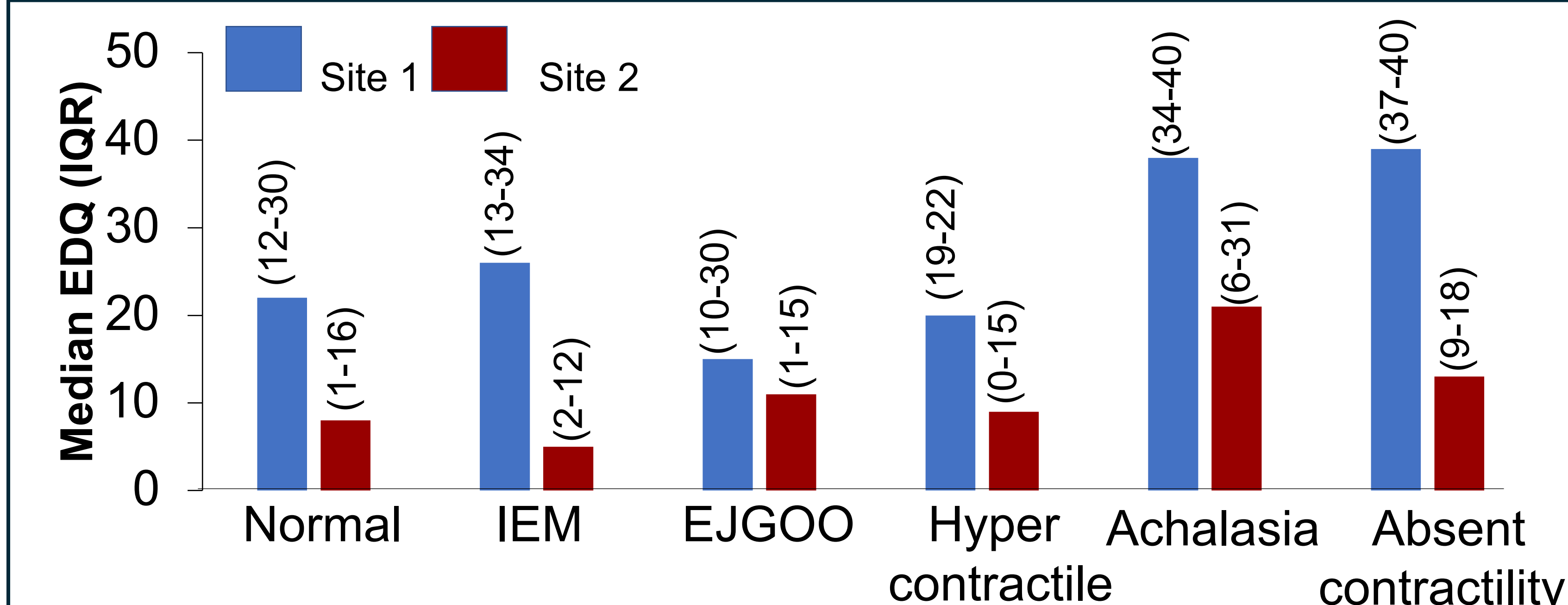


Figure 3. Median EDQ for each HRM diagnosis at sites 1 and 2.

- Median EDQ scores were higher at site 1 vs. 2 (25 vs. 8,  $p<0.001$ ).
- A higher % of normal HRMs had EDQ scores  $\geq$  7 at site 1 vs 2 (85.7% vs 54.6%,  $p<0.001$ ).
- There was no difference in % of EDQ  $\geq$  7 among diagnoses of IEM, EGJOO, hypercontractile, achalasia, and absent contractility between sites.
- Multivariable analysis shows that the odd of EDQ  $\geq$  7 remains higher at site 1 vs. 2 after adjusting for age, gender, and diagnosis (OR 4.25, 95% CI 2.00-9.05).

## CONCLUSIONS

- IEM was more frequently a diagnosis at the private hospital, while achalasia type 2 was more frequently diagnosed at the safety net hospital.
- Symptom duration and esophageal diameter in achalasia type 2 were similar at the two sites, suggesting similar severity.
- Despite this and an otherwise similar HRM diagnosis profile, dysphagia symptom scores remain more severe in patients at a safety-net hospital vs. those at an affiliated private academic, including those with normal HRM.
- These interesting findings merit further investigation.