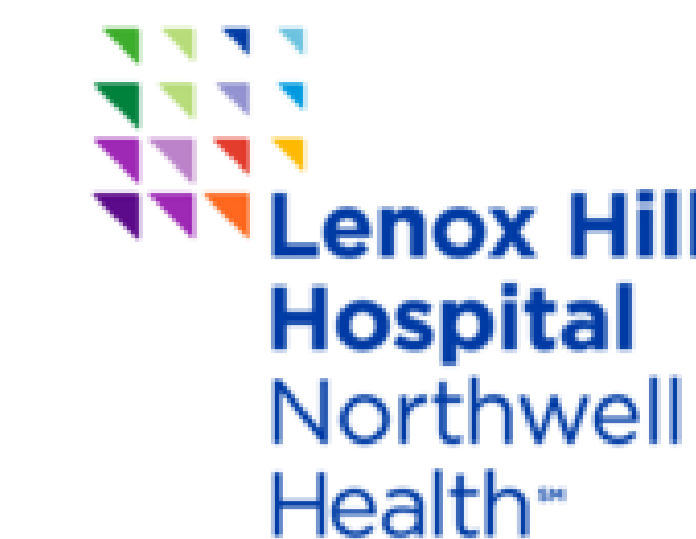




(MP34-07) Correlating Crowd-Sourced Assessment of Technical Skills (CSATS) with Post-Operative Complication Rates in Urologic Robotic Surgery



Joseph Sarcona¹, David Mikhail^{1,2}, Aaron Tabibzadeh², Daniel Nassau¹, Zachary Kozel², Manish Vira², Michael Schwartz², Michael Feuerstein¹, Kreshover Jessica², Louis Kavoussi², Lee Richstone¹

1: Lenox Hill Hospital, Northwell Health; 2: North Shore-LIJ Northwell Health

Introduction

- CSATS is a validated robotic surgery technical skills evaluation designed for surgeon feedback and quality
- While CSATS has correlated with technical outcomes such as anastomotic leaks following robotic prostatectomy, there is a paucity of data comparing it to surgical complications in urology

Objective

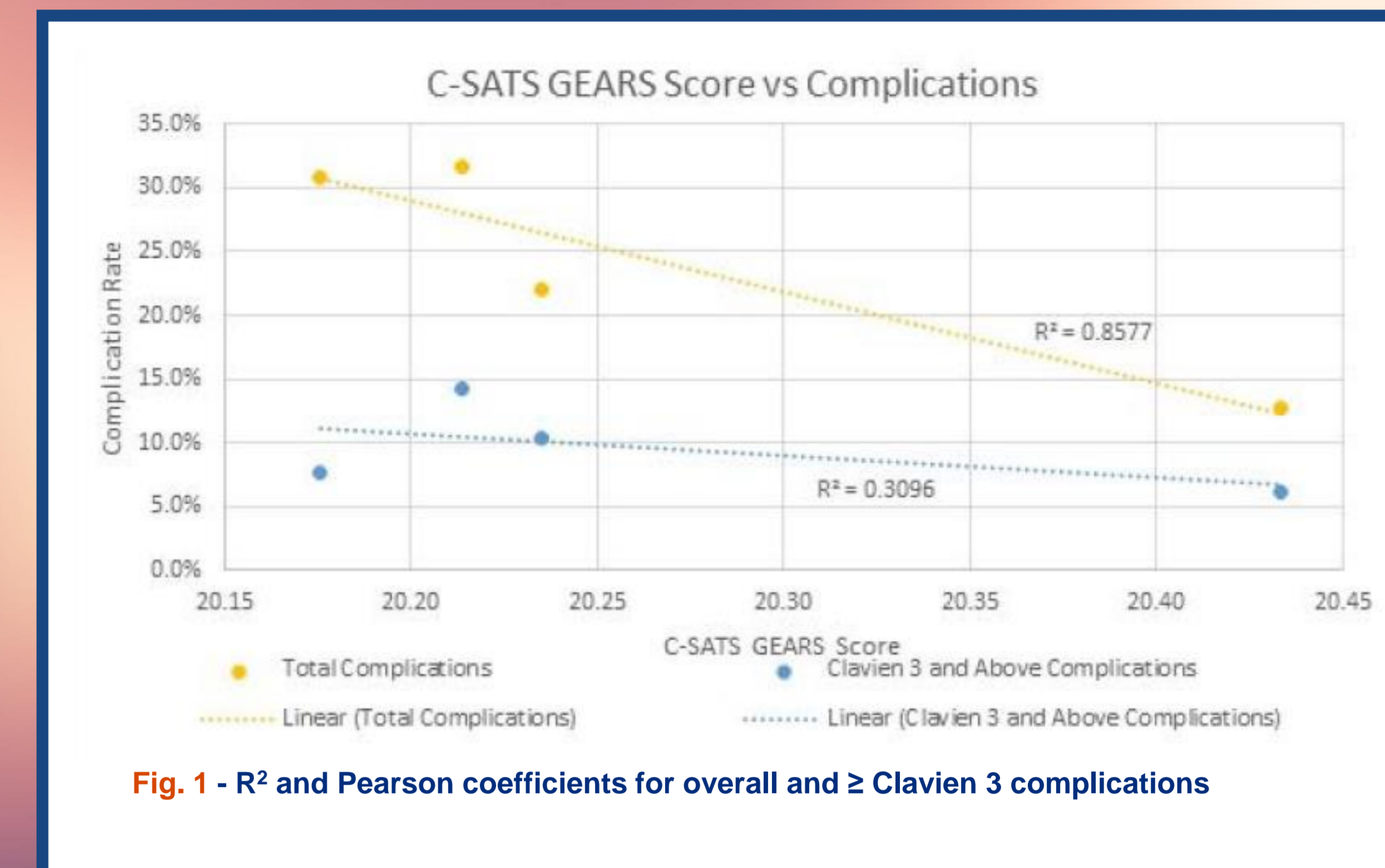
- Compare CSATS score with complications after robotic urologic surgery

Methods

- We compared a historical, prospectively kept complications database and compared it to current CSATS data on fellowship trained, adult urologists with minimum of 10 CSATS cases within our health system
- CSATS score and surgeon quartiles were compared to total and \geq Clavien grade 3 complications.

Results

- 196 urology cases were submitted to CSATS in our health system. Of these, 125 cases by 4 fellowship trained urologists had complete complication data from a historical robotic complications database
- CSATS Case Breakdown: prostate (75%), bladder (10%), upper tract (13%), and other (2%) procedures
- Historical complications database included 315 robotic cases by the same 4 urologists with overall total complication rate of 20.3% (13-32%), with 8.9% (6-14%) Clavien 3 complications
- Mean CSATS score was 20.26 (20.18 to 20.43) with 2 surgeons in 3rd Quartile and 2 in top quartile
- CSATS score correlated with total and \geq Clavien 3 complications with Pearson coefficients of -0.926 (R2 0.858) and -0.556 (R2 0.310) respectively (Fig. 1)
- Being in the top quartile did not significantly reduce \geq Clavien 3 complications (6.3% vs. 12.1%, p=0.07) using chi-squared analysis.



Conclusions

- Overall complication rate was strongly correlated to CSATS score.
- Significant complications weakly correlated to CSATS score, but approached significance with surgeon quartiles.
- With these preliminary metrics, we are currently evaluating the correlation of technical skills and complication rates across all robotic procedures in our health system.

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