Prioritization and triage scoring of gynecologic surgery during the COVID-19 pandemic

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OBJECTIVES: The COVID-19 pandemic disrupted access to elective surgery. As surgery resumed it was imperative to be intentional about case selection to minimize risk to patients and staff and to better allocate resources. Our institution adopted the medically necessary time sensitive scoring tool (MeNTS) (Prachand et al. 2020) and the modified Elective Surgery Acuity Scale (ESAS) to help stratify overall risk of operating on an individual basis. Our objective was to investigate the correlation among ESAS tier, MeNTS score, and surgeon consensus ranking of necessity of surgery.

MATERIALS AND METHODS: This is a cross-sectional study to investigate the utility of surgical evaluation tools in managing the backlog of gynecologic surgical cases due to COVID-19. In preparation for the resumption of elective surgery in June 2020, senior gynecologic surgery staff at our institution attended prioritization meetings to rank, score, and discuss 152 backlogged gynecologic surgery cases. The primary surgeon assigned each case a MeNTS score and an ESAS tier. The senior staff collaboratively assigned a surgeon consensus score (range 1-4, with 1 being the most urgent cases). The degree of correlation amongst scoring tools was assessed using the Spearman Rho test. The frequency distribution of given scores was also evaluated to determine significant scoring differences amongst gynecologic subspecialties.

RESULTS: One hundred fifty-two cases were scored by 12 faculties. This consisted of 33 benign gynecology, 48 urogynecology, 27 minimally invasive surgery, and 44 oncology cases. Across all gynecologic cases, there was a moderate correlation between the MeNTS and surgeon consensus, r = 0.47 (P < 0.03) and between MeNTS and ESAS, r = -0.37 (P < 0.03) (Fig 1A). However, when cases were analyzed by sub-specialty, there was stronger correlation between ESAS tier and MeNTS score, r = 0.57, (P < 0.03) for oncology cases (Fig 1B). Urogynecology cases had a strong correlation between ESAS tier and surgeon consensus scores, r = -0.72 (P < 0.03) (Fig 1C).

CONCLUSION: All scoring tools exhibited weak to moderate correlation with surgeons’ consensus and with each other with the exception of urogynecology. The ESAS scoring tool correlates best with senior gynecologic surgeon faculty clinical judgment. However, significant differences are apparent in scores across gynecologic subspecialties that require special attention in prioritizing surgeries in the context of a pandemic.

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