Powdered hemostats are used to stop continuous broad-surface oozing bleeding in patients undergoing a large variety of surgical procedures.

Despite the availability of different powdered hemostats, including oxidized regenerated cellulose (ORC) and microreticular polymer bead (MP) options, little is known about variations in outcomes among them, variations in the composition and product features of powdered hemostats, like ORC’s antibacterial properties, could result in differences in outcomes.

This study aimed to compare clinical and economic outcomes among patients undergoing c-section or open hysterectomy who received either ORC or MP powdered hemostats.

This study was funded by Ethicon.

References


Discussion

Patients who received ORC had lower average costs per discharge than patients who received MP; this held true among both c-section and hysterectomy procedures (with a difference in costs of $2,510 and $2,147, respectively). Among patients who underwent c-section, average length of stay was lower in the ORC cohort, with the results approaching statistical significance (p=0.02).

Hypotheses about the results: The higher cost per discharge in the MP cohort may be due to the shorter length of stay in the ORC cohort. However, patients who received ORC had lower average costs per discharge than patients who received MP; this held true among both c-section and hysterectomy procedures (with a difference in costs of $2,510 and $2,147, respectively). Among patients who underwent c-section, average length of stay was lower in the ORC cohort, with the results approaching statistical significance (p=0.02).

Study limitations: Unmeasured confounding (it is as possible there are factors not captured in the data, because this is a retrospective observational study) and this study relies on accurate coding of ORC/MP exposure, patient characteristics, and reported outcomes (as it is the case with all analyses of administrative data).