Focus on ovarian cancer surgical volume may not be best metric

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Limiting ovarian cancer surgery to high-volume surgeons and hospitals

to improve survival could restrict care at many low-volume centers with better-than-expected outcomes, according to a study published in the June issue of *Obstetrics & Gynecology*.

Jason D. Wright, M.D., from the Columbia University Vagelos College of Physicians and Surgeons in New York City, and colleagues used the National Cancer Database to identify 136,196 women who underwent ovarian cancer treatment at 1,321 hospitals from 2005 to 2015. Observed and expected mortalities were estimated using multivariable models. The authors modeled the number of hospitals that would be restricted if minimum-volume standards were implemented.

The researchers found that in 2015, using a minimum-volume cut point of one case in the previous year would have eliminated 13.6 percent of hospitals, while a cut point of three would have eliminated 34.5 percent of hospitals. The mean observed/expected ratios for hospitals with a prior-year volume of one were 1.14, 1.06, 1.12, and 1.08 for 60-day, one-year, two-year, and five-year mortality, respectively. Among hospitals with a prior-year volume of one, 49.2 percent had an observed/expected ratio for two-year mortality of at least 1, while 50.8 percent had an observed/expected ratio of less than 1. The mean observed/expected ratios for hospitals with a prior-year volume of no more than two were 1.11, 1.09, 1.08, and 1.07 for 60-day, one-year, two-year, and five-year mortality, respectively. Implementing a minimum-volume standard of one case in the previous year would result in one fewer death for every 198, 613, and 62 patients at 60 days, one year, and five years, respectively.

"An arbitrary minimum-volume standard may be unnecessarily punitive for low volume centers with good outcomes," Wright said in a statement.

More information: Abstract/Full Text (subscription or payment may be required)