



ASO Author Reflections: Incomplete Cytoreduction Prediction Model for Pseudomyxoma Peritonei

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PAST

Pseudomyxoma peritonei (PMP) is a rare disease.¹ The completeness of cytoreduction is an important prognostic factor for PMP because patients who experienced complete cytoreductive surgery (CCRS) had a 5-year survival rate of 85 % compared with those who had incomplete cytoreduction (IC).² To date, no nomograms have been established to predict incomplete cytoreduction (IC) for patients with PMP.

PRESENT

The current study developed a nomogram to predict IC for PMP patients. The study enrolled 144 PMP patients between 1 June 2013 and 22 November 2019. Logistic regression modeling identified four factors (sex, disease duration, anemia, and carbohydrate antigen 19-9 [CA 19-9]) that independently predict IC for PMP patients. The study then established a nomogram predicting IC, which demonstrated good predictive accuracy (C-index, 0.837; 95 % confidence interval, 0.764–0.894).³

FUTURE

A former study found that an experienced radiologist could assess the total peritoneal cancer index (PCI) correctly on both computed tomography (CT) and magnetic resonance imaging (MRI) scans.⁴ The PCI is used to reflect

tumor burden for PMP, and a higher PCI always denotes unresectable disease for PMP. Therefore, the PMP center requires not only experienced surgeons, but also experienced radiologists. In the future, the CT or MRI-PCI will be assessed in the prediction model. Finally, prospective and multi-institutional research should be conducted for external validation aimed at accurate prediction of cytoreducibility among PMP patients to establish preoperative plans.

DISCLOSURE There are no conflict of interest.

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