

Adverse Operative Risk Factors for Perforated Peptic Ulcer

W H Chan,**MBBS, M Med (Surg), FRCS (Edin)*, W K Wong,***FAMS, MBBS, FRCS (Edin)*, L W Khin,****MBBS, MSc*, K C SOO,*****FAMS, MD, FRACS*

Abstract

Introduction: Mortality from perforated peptic ulcer still remains high as a result of more perforations in the elderly who are generally more ill. We conducted this retrospective study to determine the adverse operative risk factors for perforated peptic ulcers. **Materials and Methods:** Two hundred and six consecutive patients operated for perforated peptic ulcers from 1 January 1993 to 31 December 1997 were reviewed. **Results:** Majority (n = 194) of the patients had perforations at the pyloroduodenal region and the remaining 10 patients had perforated benign gastric ulcers. The median age at surgery was 58 years (range 18 to 91 years). Forty-four patients (21.4%) were more than 70 years old. The 30-day operative mortality rate was 10.7% (n = 22). Advanced age (>70 years), female gender, concurrent major medical illness, perforation developed while hospitalised for other medical illnesses, prolonged perforation (>24 hours) and preoperative hypotension (systolic blood pressure <90mmHg) were indicators for operative mortality by univariate analysis. By logistic regression analysis, only concurrent major medical illness, prolonged perforation and preoperative hypotension were independent adverse risk factors. The operative mortality rate for patients with 0, 1, 2 and 3 independent adverse risk factors were 0%, 11%, 30% and 88%, respectively. **Conclusions:** As concurrent medical illness is a non-modifiable factor and preoperative hypotension is usually resulting from treatment delay and inadequate resuscitation, emphasis should place on shortening the time to surgery as well as prompt resuscitation.

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Key words: Mortality, Perforated peptic ulcer, Poor risk factors, Preoperative hypotension, Prolonged perforation

* Registrar

** Consultant

**** Associate Professor and Head

Department of Surgery

Singapore General Hospital

*** Epidemiologist

Clinical Trials & Epidemiology Research Unit

National Medical Research Council, Singapore

Address for Reprints: Dr W K Wong, Department of Surgery, Singapore General Hospital, 1 Hospital Drive, Singapore 169608.