

## OP 3.4

### **USE OF METHYLENE BLUE DYE TO TEST FOR LEAKS AFTER OESOPHAGEAL ANASTOMOSIS : IS IT RELIABLE ?**

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#### **Introduction :**

Anastomotic leaks are an important cause of morbidity and mortality after oesophageal surgery. In most surgical units a contrast swallow is used to test the anastomosis prior to commencement of feeding. The objective of the study was to assess the reliability of using Methylene Blue as an alternative.

#### **Material and Methods:**

Twelve Methylene Blue swallows were performed on 10 consecutive patients with oesophageal carcinoma who underwent oesophago-gastric anastomosis during the period May 2002 to May 2004. Their ages ranged from 42 to 74 years with a male : female ratio of 2 : 8. Of the anastomoses 8/10 were cervical and 2/10 were thoracic.

The test was performed on 5<sup>th</sup> to 7<sup>th</sup> post-operative day. Chest and/or cervical drains were in place to detect leaks. The first 5 patients underwent a gastrograffin swallow on the same day.

#### **Results :**

A leak was detected within 5 minutes in 1/10 patient who underwent a thoracic anastomosis. Her test was repeated twice at weekly intervals. It was negative only on the third occasion. The results of all three tests were confirmed by gastrograffin swallow. The other 9/10 patients did not show a leak. Oral feeding was commenced soon after the methylene blue tests were found to be negative.

#### **Conclusions:**

The methylene blue test is cheap, radiation free and can be performed easily in a ward setting. The initial results of this ongoing study indicate that it is safe and reliable.