**Original article:**

**Whether culture positivity and Perforation-operation interval affects mortality in perforation peritonitis ? : Experiences of a Rural Medical College**

**Dr Aslam A Shivani , Dr Vinod V Prabhu**

Department of Surgery, Bharati Vidyapeeth University, Bharati Medical College , Sangli. Maharashtra. India

Corresponding author : Dr Vinod V Prabhu

**Abstract:**

**Background & objectives :** The endeavour was to study the microbial profile in a rural medical college hospital having a small gestational existence of eight years and to study the correlation of mortality to various organisms and perforation-operation interval (PO).

**Methods:** Two hundred and seventy six cases of perforation peritonitis were studied in eight years for the microbial pattern isolated from peritoneal fluid during exploratory laparotomy. The presence or absence of organisms were compared to the mortality of patients. The relationship of mortality, to the PO interval was compared for any statistical significance.

**Results:** Out of two hundred and seventy six cases 130 cases yielded positive culture and 146 yielded negative culture. The mortality rate in culture positive cases was 25.38 % whereas it was 4.1 % in culture negative cases. The mortality rate in culture positive patients presenting within 24 hours was 23.63% whereas the mortality rate in culture positive patients presenting more than 24 hours was 26.66%.

**Conclusions:** PO interval and culture positivity of the peritoneal fluid has a direct bearing on mortality of patients with non traumatic perforation peritonitis. The mortality is more as PO interval increases as also the culture positivity of peritoneal fluid.

**Keywords:** peritonitis, perforation-operation interval, mortality, microbial