MATERIAL AND METHODS
During one year period from May 1990 to May 1991, fourteen patients were treated by primary repair for penetrating colon injuries at Maharani Laxmi Bai Medical College and Hospital, Jhansi (U.P.) India.

All patients admitted with penetrating colonic injuries who were treated by primary repair were included in the study. There were 11 men and 3 women. Their ages ranged 17 to 55 years. The mode of injuries were: Gunshot wounds (7), stab wounds (4), blast injuries (1) and iatrogenic wounds (2).

The emergency room treatment protocol consisted of resuscitation and aggressive restoration of volume deficit with balanced salt solution and type-specific crossmatched blood in hypotensive patients. A combination of antibiotics—Ampicillin, Gentamycin and Metronidazole were administered intravenously to all patients with penetrating abdominal trauma.

Decision to perform laparotomy was made on clinical grounds in most of the patients and in few cases of stab wounds with equivocal abdominal signs, peritoneal lavage was used. Skilagram abdomen ( erect view ) were taken.
Operation was begun as soon as possible and the mean time interval between arrival to emergency room and operation was 4 hours. Two thirds of the patients were in the operation room within 3 hours of arrival.

Intraoperatively, after control of haemorrhage colon injuries were assessed for their location, extent of damage and degree of faecal contamination. The associated organ injuries were also properly assessed and treated. In all the cases primary repair of colon perforation(s) in one layer after debridement of devitalised tissue was done. Colon resection was performed when the injury was extensive and/or when the vascularity of the segment was compromised. In all cases peritoneal lavage was done with metronidazole and normal saline. In infected cases betadine was also added for peritoneal lavage. In four cases anal dilatation was done at the time of operation making the anal sphincter incompetent. In five cases a flatus tube was passed and stitched to perineal areas leaving it there for one week. In five cases a Ryle's tube from anal canal past the sutured colonic tear into descending/sigmoid colon was used.

Post-operatively combination of antibiotics Ampicillin, Gentamycin/Kanamycin and Metronidazole was used in all cases was continued for 5 to 7 days. Faecal
Faecal matter coming out of Ryle's tube (put through anus) or flatus tube was cultured for aerobic and anaerobic bacteria. Irrigation with Kunnamycin and Metronidazole was done and difference in bacterial content noted.