**Clinical Profile of Patients with Postoperative Adhesive Intestinal Obstruction and its Association with Intraoperative Peritoneal Adhesion Index**

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**Abstract**

Adhesions following surgery represent a major unsolved problem. They occur after 50% to 100% of all surgical interventions in the abdomen and may complicate the work of the surgeon considerably. Peritoneal adhesions are pathological bands that typically form between the omentum, the small and large bowels, the abdominal wall, and other intra-abdominal organs. These bands may be a thin film of connective tissue, a thick fibrous bridge containing blood vessels and nerve tissue, or a direct adhesion between two organ surfaces.

*Aims and Objectives:* 1. To study the clinical profile of patients with adhesive intestinal obstruction undergoing laparotomy. 2. To assess and analyze the intra-operative peritoneal adhesion index (PAI) in individual cases. 3. To associate the clinical profile with peritoneal adhesion index in patients of adhesive intestinal obstruction.

*Result:* The study was conducted in the Department of Surgery, Himalayan Institute of Medical Sciences (HIMS), SRH University, Dehradun, India over a period of 12 months. A total of 30 patients with diagnosis of post operative adhesive intestinal obstruction were recruited in the study. It was observed that adhesions over each abdominal region contributed equal to the total PAI. In this study it was observed that the patients who had previous emergency surgery had higher incidence of adhesions, than elective surgery whereas those patients who underwent both elective and emergency surgeries, the incidence of adhesions were lowest. Analysis of variance with respect to abdominal scar resulted that the difference between groups was observed to be statistically not significant ($P>0.05$), so patients with all type of abdominal scars of previous surgeries has equal chance of developing adhesions.

*Conclusion:* PAI is a sensitive tool for clinical and intra-operative assessment of adhesive intestinal obstruction for the quantification of the adhesions and gives a precise description of the underlying intra-abdominal condition while planning a surgical management of the disease

**Key words:** peritoneal adhesion index, adhesive intestinal obstruction, laparotomy, scar