

that the apex of the intussusceptum could be felt in the rectum. He performed Nelaton's operation and the patient recovered. Nine months after the operation both the invagination and the artificial intestinal fistula remained. The intestinal fistula in such cases is only made to meet the urgent symptoms caused by the obstruction, and if the patient survives the operation and the invagination is not removed spontaneously subsequently is to be followed by radical measures with the intention of restoring the continuity of the intestinal canal at the seat of obstruction by reducing the invagination, enterectomy, or intestinal anastomosis.

*Laparotomy.*—Remembering that the general mortality of invagination is seventy per cent., and in children less than eleven years of age spontaneous cure by sloughing and elimination of intussusceptum does not exceed twelve per cent., it becomes plain that in cases where reduction is not accomplished by rectal insufflation, as described above, a laparotomy is indicated in all instances where the general condition of the patient is such as to justify such a procedure. There is absolutely no excuse in postponing the operation, as every hour adds to the exhaustion of the patient from the obstruction and adds new dangers, arising from the complications, which are surely to develop at the seat of obstruction. A radical operation undertaken at a time when the pulse is in a fair condition and before septic inflammation has reached the peritoneal cavity holds out a fair prospect of a satisfactory result. It is true that the experience of the past in the operative treatment of invagination is not such as to inspire confidence, but it must not be forgotten that almost without exception the abdomen was opened as a last resort, after the patient had become completely prostrated by the disease, or after the invagination had given rise to irreparable local conditions. Instead of discouraging operative interference, the statistics collected so far are the strongest possible arguments in favor of early operative interference where simpler measures, faithfully carried out, have failed.

Ashhurst ("Laparotomy for Intussusception,"—*American Journal Medical Sciences*, July, 1874, p. 48) brought together, with more or less detail, the histories of thirteen cases in which laparotomy had been undertaken for the relief

of intussusception. Of this number, five recovered and eight died. As the result of a careful study of his cases, he has come to the conclusion that the operation is not admissible in patients less than one year of age, as all operations up to that time done in children less than a year of age proved fatal. He also advises against an operation when the symptoms present, and particularly the existence of intestinal hemorrhage, render it probable that the tightness of the intussusceptum will lead to sloughing of the invaginated portion, as he claims that under these circumstances an operation would almost surely fail, while there is a fair hope that separation of the invaginated mass might lead to spontaneous recovery. Against the special contra-indications of the operation advanced here, it can be said that experience has abundantly shown that cure by spontaneous elimination of the intussusceptum seldom, if ever, takes place in very young children and infants; consequently, the hopelessness of the situation in such cases, where legitimate efforts at reduction have failed, can be advanced as the most logical argument in favor of operative treatment, as the patient and surgeon have nothing to lose and everything to gain. Knaggs (*The Lancet*, June 4th, 11th, 1887), after reporting an unsuccessful case of abdominal section for invagination that occurred in his own practice, gives the results of thirty-seven operations, including his own. Of this number, eight recovered and twenty-nine died. In many of these cases peritonitis had set in before the operation was performed, and this condition and not the operation was answerable for the subsequent fatal issue.

Sands (*New York Medical Journal*, June, 1887) has tabulated the records of twenty-one cases of laparotomy for intussusception, eight of which have occurred since the publication of Ashhurst's paper. Of twenty cases in which the result of the operation is given seven recovered, and thirteen proved fatal, thus showing a mortality of sixty-five per cent. After a study of these cases, he came to the conclusion that the prognosis after operation is also influenced by the age of the patient; thus, of twelve cases of patients two years old or under, three recovered and nine died; of seven cases sixteen years old or over, four recovered and three died;