



MANAGEMENT OF ACCIDENTAL SEWING NEEDLE INGESTION [FOREIGN BODY INGESTION] BY WATCHFUL EXPECTANCY: A CASE REPORT.

General Surgery

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ABSTRACT

Sewing needle ingestion by accident is an emergency condition requiring immediate treatment. The risk of perforation due to the sewing needle causes difficulty in needle retrieval and puts the patient at risk of perforative peritonitis. Immediate endoscopic retrieval may be attempted as early as possible. Treatment may vary from watchful expectancy to laparoscopy to laparotomy. Needle migration may occur from gastrointestinal tract into adjacent important vascular structures. This is a case report of accidental sewing needle ingestion by a teenager girl managed by watchful expectancy at our tertiary teaching hospital. The patient complained of slight abdominal pain, constipation and slight obstipation on admission; almost 16 hours after sewing needle ingestion. The patient was managed conservatively and treated with laxatives. Successful management of sewing needle ingestion by watchful expectancy has been reported in our case.

KEYWORDS

Sewing needle ingestion, perforation, watchful expectancy.

INTRODUCTION:

Sewing needle ingestion by accident is an emergency condition. The risk of perforation due to the needle causes difficulty in needle retrieval and puts the patient at risk of perforative peritonitis. Various ways to manage the needle ingestion have been reported from conservative management to operative surgery. Immediate endoscopic retrieval may be attempted as early as possible. Treatment may vary from watchful expectancy¹ to laparoscopy to laparotomy^{2,3,4}.

Complications like internal jugular vein thrombosis due to needle migration from the pharynx into the internal jugular vein has been reported leading to neck abscess and acute cervical cellulitis in a study by Bendiouri, R⁵. Needle migration to sigmoid mesocolon⁶ and to liver and the retrocolic area behind ascending colon⁷ has also been reported in separate case reports.

We report a case of accidental sewing needle ingestion by a teenager girl managed by watchful expectancy at Malla Reddy Medical College for Women and tertiary teaching hospital.

Case Report:

A 14-year-old female patient came with history of accidental swallowing of sewing machine needle at 7 pm on 11-05-25 to the emergency of Malla Reddy Medical College for Women and Malla Reddy Narayana Multi-Speciality Hospital the day after the episode.

The patient had slight dull abdominal pain after the episode. There was no vomiting, loose motions, pain abdomen or fever.

The patient had X-ray done at local hospital 2 hours after the episode at night and was referred to Malla Reddy Medical College for Women for further management on the next day morning.

The patient complained of slight abdominal pain, constipation and mild obstipation. On admission, vitals were stable, abdomen was soft, slight tenderness was present in the umbilical region. The initial X-ray of the patient showed the needle in the mid abdomen. [Figure 1].

The patient was admitted and kept nil by mouth, on observation and serial X-rays were done. Intravenous fluids administration, intravenous antibiotics and syrup cremaffin [laxative containing liquid paraffin] was advised for bowel motility. Conservative treatment was continued with continuous monitoring of vital parameters and checking abdomen periodically for abdominal signs. X-ray done 12 hours after admission showed the needle at the rectosigmoid junction. [Figure 2].

The patient was able to have free bowel movement the next day after the needle ingestion at midnight, that is, 36 hours after the needle ingestion and passed the needle with the stools. [Figure 3]. She was able to recover the needle from the stools. An X-ray done after the procedure showed no evidence of foreign body. [Figure 3].



Figure 1: Plain abdomen x-ray showing ingested needle in the mid abdomen



Figure 2: Plain abdomen x-ray showing the ingested needle [foreign body] in the small intestine and at the rectosigmoid junction



Figure 3: Sewing needle retrieved in stools and plain abdomen x-ray after passage of needle in stools

DISCUSSION

A thorough search of literature was done to understand the incidence of sewing needle ingestion. The literature search revealed varied instances of single to multiple needles ingestion managed with both conservative treatment, watchful expectancy and uneventful egestion of the sewing needle in stools found in a study by Molla, Y. D¹. In a case report; Bozorgmehr, R² noted that laparoscopy has been used to retrieve ingested sewing needles uneventfully.

The endoscopic management of retrieval of a sewing pin ingested accidentally by a tailor was explained in a case report by Stojkovic, S³. Multiple needles ingestion with severe perforative peritonitis with multiple bowel perforations in stomach and duodenum has been reported by Misra⁴ et al leading to exploratory laparotomy and repair of

the perforated bowel along with the needles' removal. Complication like the internal jugular vein thrombosis due to needle migration from the neck into the internal jugular vein has been reported leading to neck abscess and acute cervical cellulitis in a study by Bendiouri, R⁵. Migration of the sewing needle from the sigmoid colon to the outside of the bowel into the sigmoid mesocolon has been reported in a 2 year old girl who has come with accidental ingestion of the sewing needle in a case report by Cevizci⁶. The needle has been retrieved by open laparotomy by incising the mesocolon and removing the needle. A case of two sewing needles retrieval on laparotomy has been reported 2 years after ingestion from a 16 year old girl by Hasan R M⁷ wherein one needle was removed from left lobe of liver and other was removed from retrocolic area near ascending colon. In our case, the needle was recovered with watchful expectancy.

CONCLUSION:

Management of ingested foreign bodies has varied management from watchful expectancy to operative surgical emergency. Sharp foreign bodies cause risk of perforation of the gastrointestinal tract. Needle migration into the internal jugular vein from accidental ingestion of the sewing needle with neck migration increases the risk of jugular vein thrombosis. Endoscopic removal, laparoscopy, laparotomy and management by watchful expectancy are some of the treatment options available. Spontaneous passage of the needle by watchful expectancy is observed in some cases. Multiple options to treat the patients have been reported as discussed based on the location of the needle and the clinical features seen. Retrieval of needle from sigmoid mesocolon has been reported in a two year old child three months after ingestion. Also, removal of two sewing needles from 16 year old female 2 years after ingestion from left liver lobe and retrocolic area near ascending colon by laparotomy has been reported. Underlying psychiatric conditions need evaluation in patients with intentional ingestion of needles. Successful management with watchful expectancy has been reported in our case.

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Conflict Of Interest Statement

Nil

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