



DELIBERATE SHARP METALLIC FOREIGN BODY INGESTION IN MENTALLY COMPETENT YOUNG ADULTS WITHOUT PSYCHIATRIC ILLNESS: A TEN-CASE SERIES AND REVIEW OF MANAGEMENT STRATEGIES

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ABSTRACT

Background: Foreign body ingestion is frequently encountered in emergency surgical practice. While most cases occur accidentally in children, deliberate ingestion of sharp metallic foreign bodies in mentally competent adults without psychiatric illness is uncommon and poorly described. Sharp metallic objects carry a high risk of gastrointestinal perforation, obstruction, abscess formation, and peritonitis, requiring individualised management.

Methods: This retrospective case series included ten consecutive mentally competent young adults presenting with deliberate ingestion of sharp metallic foreign bodies between January 2017 and June 2018. Demographic characteristics, clinical presentation, radiological findings, treatment, operative details, and outcomes were analysed.

Results: Ten male patients aged 18–23 years were included. Eight patients (80%) had ingested sewing needles, one (10%) had swallowed a metallic clip, and one (10%) had ingested another sharp metallic object. Abdominal pain was the most frequent presenting complaint (60%), while two patients remained asymptomatic. Plain abdominal radiography accurately localised the foreign body in all patients. Eight patients (80%) were managed conservatively with serial clinical assessment and radiographic follow-up, resulting in spontaneous passage of the foreign body. Two patients (20%) developed perforation peritonitis requiring exploratory laparotomy and successful retrieval of the foreign body. There was no mortality, no major postoperative morbidity, and all patients achieved complete recovery.

Conclusion: Deliberate ingestion of sharp metallic foreign bodies in mentally competent young adults is uncommon but may result in life-threatening complications. Careful clinical observation, serial radiographic monitoring, and timely surgical intervention are essential for successful management. Although most patients can be managed conservatively, prompt operative treatment is warranted in those who develop perforation or generalised peritonitis.

Keywords: Foreign Body Ingestion, Sharp Metallic Foreign Body, Sewing Needle, Gastrointestinal Perforation.

INTRODUCTION

Foreign body ingestion is a common clinical problem encountered in emergency departments and surgical practice worldwide.

Although it occurs predominantly in the pediatric population, adult foreign body ingestion remains an important clinical entity because of its distinct aetiology, higher incidence of intentional ingestion, and greater potential for gastrointestinal complications. Approximately 80–90% of ingested foreign bodies pass spontaneously through the gastrointestinal tract without intervention, whereas 10–20% require endoscopic removal and fewer than 1% ultimately require surgical management.^{1–6}

The epidemiology of foreign body ingestion differs considerably between children and adults. In children, ingestion is usually accidental and involves coins, toys, batteries, or small household objects. In adults, however, ingestion frequently occurs in



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association with food bolus impaction, psychiatric disorders, intellectual disability, alcohol intoxication, substance abuse, or institutionalization.^{3,4,7,8} Deliberate ingestion among mentally competent adults without underlying psychiatric illness is distinctly uncommon and has received little attention in the surgical literature. Consequently, the diagnosis and management of such patients remain challenging.

Sharp metallic foreign bodies—including sewing needles, safety pins, nails, razor blades, wires, and metallic clips—represent a particularly hazardous subgroup because of their ability to penetrate the gastrointestinal wall. Unlike blunt objects, sharp foreign bodies may become impacted at anatomical narrowing or angulations of the gastrointestinal tract and can subsequently cause bowel perforation, localized abscess, fistula formation, haemorrhage, obstruction, or generalised peritonitis.^{9–13} Reported complication rates for sharp-pointed foreign bodies range from 15% to 35%, substantially exceeding those associated with blunt foreign bodies.^{14,15}

The clinical presentation of foreign body ingestion is highly variable and depends upon the nature, size, shape, location, and duration of impaction. Many patients remain asymptomatic despite the presence of a potentially dangerous object, whereas others present with dysphagia, odynophagia, chest pain, abdominal pain, vomiting, fever, or signs of bowel perforation.^{10,14} Because symptoms may be minimal or delayed, a high index of clinical suspicion is required, particularly in patients providing a reliable history of ingesting a sharp object.

Radiological evaluation plays a central role in diagnosis and management. Plain radiography remains the first-line imaging modality for metallic foreign bodies because it is widely available, inexpensive, and highly sensitive for radiopaque objects. Serial abdominal radiographs allow monitoring of distal migration and assist in determining the need for intervention.^{16,17} Computed tomography (CT) provides superior anatomical localisation and is the imaging modality of choice when bowel perforation, migration beyond the gastrointestinal lumen, abscess formation, or localised peritonitis is suspected.^{17,18}

Endoscopy remains the preferred therapeutic modality for foreign bodies located within the oesophagus, stomach, or proximal duodenum. According to the American Society for Gastrointestinal Endoscopy (ASGE) and the European Society of Gastrointestinal Endoscopy (ESGE), sharp-pointed foreign bodies should be removed urgently whenever they remain accessible because of the substantial risk of perforation.^{5,6} Once the object has migrated beyond the proximal small intestine, conservative management with close clinical observation and serial radiological

assessment may be appropriate in asymptomatic patients, whereas failure of progression, increasing abdominal pain, bowel obstruction, perforation, or generalized peritonitis constitute accepted indications for operative intervention.^{5,6,16}

Several large retrospective studies have described the epidemiology and management of foreign body ingestion. Velitchkov et al.⁹ reviewed 542 patients and reported spontaneous passage in the majority of cases, with surgery required in less than 1%. Palta et al.³ similarly observed that intentional ingestion was uncommon but associated with increased healthcare utilisation. Ambe et al.⁴ emphasised that management should be individualised according to the type and location of the foreign body rather than adopting a uniform treatment strategy. More recent reviews by Aiolfi et al.²⁵ and Fung et al.²⁶ further support selective conservative management while emphasising early recognition of complications requiring operative treatment.

Although numerous studies have evaluated foreign body ingestion in adults, most comprise heterogeneous populations involving food boluses, fish bones, dentures, coins, batteries, and miscellaneous objects. Reports specifically examining deliberate ingestion of sharp metallic foreign bodies in mentally competent young adults remain limited, and published case series involving more than a few patients are uncommon.^{3,8,25} This lack of focused data creates uncertainty regarding the optimal management of this unique subgroup.

The present study describes a retrospective series of ten consecutive mentally competent young adults who deliberately ingested sharp metallic foreign bodies over 18 months. Eight patients ingested sewing needles, one ingested a metallic clip, and one ingested another sharp metallic object. All patients underwent standardised clinical evaluation and radiological assessment, followed by either conservative management or surgical intervention according to clinical progression.

The objectives of this study were to (i) describe the demographic profile, clinical presentation, radiological findings, and treatment outcomes of deliberate sharp metallic foreign body ingestion in mentally competent young adults; (ii) evaluate the role of serial plain radiography in guiding management; (iii) identify factors associated with the need for surgical intervention; and (iv) compare our findings with contemporary international literature and current evidence-based management guidelines.^{1–30}

CASE SERIES

The present series comprised ten consecutive mentally competent young adult males presenting with deliberate ingestion of sharp metallic foreign bodies over 18 months. The interval between

ingestion and presentation ranged from a few hours to several days. All patients underwent detailed clinical evaluation, laboratory investigations, and plain abdominal radiography at admission. Management decisions were individualised based on clinical status, serial radiographic findings, and evidence of gastrointestinal complications (Figure 1,2,3 and Tabl1,2,3).

Case 1

A 19-year-old male presented with persistent abdominal pain following deliberate ingestion of a sewing needle. The ingestion had occurred approximately one week before presentation, and the patient had initially undergone treatment at another healthcare facility. Despite conservative measures, he continued to experience progressively worsening abdominal pain without relief.

On examination, the patient was afebrile but complained of diffuse abdominal pain. Localised tenderness was present over the central abdomen without obvious abdominal distension. Laboratory investigations demonstrated mild leukocytosis. Plain abdominal radiography revealed a linear radiopaque foreign body projected over the central abdomen, with no evidence of free intraperitoneal air.

Considering the persistence of symptoms and lack of radiological progression, exploratory laparotomy was performed. Intraoperatively, a sewing needle was found penetrating the small bowel wall with localised contamination and early perforation peritonitis. The foreign body was carefully retrieved, the bowel perforation was primarily repaired, and thorough peritoneal lavage was performed. The postoperative period was uneventful. Oral feeding was resumed gradually, and the patient was discharged in stable condition following complete recovery.

Case 2

A 21-year-old male presented shortly after deliberate ingestion of a sewing needle. He denied abdominal pain, vomiting, fever, constipation, or gastrointestinal bleeding and remained completely asymptomatic throughout hospitalisation.

Physical examination was unremarkable. Baseline haematological and biochemical investigations were within normal limits. Plain abdominal radiography demonstrated a single metallic sewing needle located in the left upper quadrant, consistent with its position within the stomach or proximal small bowel.

As the patient remained clinically stable without signs of perforation or obstruction, conservative management was undertaken. He was admitted for close observation with serial abdominal examinations and repeat radiographs every 24 hours. Progressive distal migration of the foreign body was documented radiographically over the subsequent

days. The sewing needle was eventually passed spontaneously in the stool without complications. Repeat abdominal radiography confirmed complete clearance of the gastrointestinal tract. The patient remained asymptomatic at follow-up.

Case 3

An 18-year-old male presented with severe abdominal pain two days after deliberate ingestion of a sewing needle. The pain initially involved the periumbilical region but gradually became localised to the lower abdomen. There was no history of hematemesis or rectal bleeding.

On clinical examination, localised tenderness with guarding was noted in the right lower quadrant. Laboratory evaluation revealed leukocytosis with neutrophilic predominance. Plain abdominal radiography demonstrated a radiopaque linear foreign body within the right lower abdomen. Despite initial observation, the patient developed increasing abdominal tenderness and features suggestive of localised peritonitis.

Emergency exploratory laparotomy was undertaken. Operative findings revealed a sewing needle perforating the distal ileum with localised contamination. The foreign body was retrieved successfully, the bowel perforation was repaired primarily, and extensive peritoneal lavage was performed. Recovery was uncomplicated, and the patient was discharged after satisfactory wound healing.

Case 4

A 23-year-old male presented with intermittent abdominal pain following deliberate ingestion of a sewing needle. The patient was hemodynamically stable, with no fever, vomiting, or abdominal distension.

Physical examination demonstrated only mild right-sided abdominal tenderness without guarding or rigidity. Plain abdominal radiography localised the foreign body to the right upper abdomen. No radiological evidence of perforation or intestinal obstruction was observed.

In view of the stable clinical condition, conservative management was initiated. Serial abdominal radiographs obtained during hospitalisation demonstrated gradual progression of the sewing needle through the gastrointestinal tract. The patient remained clinically stable throughout observation and subsequently passed the foreign body spontaneously in the stool. Follow-up radiographs confirmed complete passage, and he was discharged without complications.

Case 5

A 21-year-old male presented after deliberate ingestion of a metallic clip. He complained of mild lower abdominal discomfort but denied vomiting, fever, constipation, or gastrointestinal bleeding.

Clinical examination revealed a soft abdomen with minimal suprapubic tenderness and no evidence of peritoneal irritation. Laboratory investigations were within normal limits. Plain abdominal radiography demonstrated a metallic clip within the pelvic cavity, consistent with its location in the distal large bowel. As there was no evidence of perforation or obstruction, conservative treatment was chosen. The patient underwent serial clinical assessment together with daily abdominal radiographs, which demonstrated progressive migration of the foreign body. The metallic clip was passed spontaneously without intervention. Repeat radiography confirmed complete clearance of the gastrointestinal tract, and the patient was discharged in good health.

Case 6

A 20-year-old male presented within 24 hours of deliberate ingestion of a sewing needle. He complained of mild, intermittent central abdominal pain but denied vomiting, fever, abdominal distension, constipation, or gastrointestinal bleeding.

On examination, the patient was hemodynamically stable. Abdominal examination revealed mild periumbilical tenderness without guarding, rigidity, or rebound tenderness. Routine haematological and biochemical investigations were within normal limits. Plain abdominal radiography demonstrated a linear radiopaque foreign body projecting over the proximal small bowel.

The patient was admitted for close observation. Serial abdominal examinations remained unremarkable, and repeat radiographs obtained every 24 hours demonstrated gradual distal migration of the sewing needle through the small bowel into the colon. The foreign body was passed spontaneously in the stool on the fourth day of hospitalisation. Follow-up radiography confirmed complete clearance of the gastrointestinal tract. The patient remained asymptomatic during outpatient follow-up.

Case 7

A 22-year-old male presented after deliberate ingestion of a metallic clip. He reported mild lower abdominal discomfort without vomiting, abdominal distension, fever, or altered bowel habits.

Clinical examination showed a soft abdomen with minimal tenderness in the left lower quadrant. Laboratory investigations were normal. Plain abdominal radiography localized the metallic clip within the descending colon.

Considering the distal location of the foreign body and the absence of clinical signs of perforation or intestinal obstruction, conservative management was initiated. The patient underwent daily clinical assessment and serial abdominal radiographs, which demonstrated progressive movement of the metallic clip toward the rectum. The foreign body was passed

spontaneously without complication on the third day after admission. Repeat radiography confirmed complete evacuation of the foreign body.

Case 8

A 19-year-old male presented with mild abdominal discomfort following deliberate ingestion of a sewing needle. The patient sought medical attention within several hours of ingestion.

General physical examination was unremarkable. The abdomen was soft with mild right-sided tenderness but no guarding or rebound tenderness. Plain abdominal radiography demonstrated a sewing needle within the proximal jejunum.

Serial radiographs showed progressive distal migration of the needle over the next several days. Throughout hospitalization the patient remained clinically stable, tolerated oral intake, and demonstrated no features of bowel obstruction or peritonitis. The sewing needle was subsequently passed spontaneously in the stool. The patient was discharged after confirmation of complete passage by repeat abdominal radiography.

Case 9

A 21-year-old male presented with intermittent abdominal pain after deliberately swallowing a sewing needle. There was no history of vomiting, fever, gastrointestinal bleeding, or constipation.

On examination, mild tenderness was noted in the lower abdomen without evidence of generalized peritonitis. Routine laboratory investigations were normal. Plain abdominal radiography localized the foreign body within the distal ileum.

The patient was managed conservatively with bowel observation, serial abdominal examinations, and repeat radiographs. Daily imaging demonstrated continuous progression of the foreign body into the large bowel. The sewing needle was passed spontaneously on the fifth hospital day without complications. The patient remained asymptomatic during subsequent follow-up.

Case 10

A 23-year-old male presented after deliberate ingestion of another sharp metallic object. He complained of progressively increasing abdominal pain associated with nausea over the preceding 48 hours. There was no history of hematemesis or rectal bleeding.

On admission, the patient was tachycardic and demonstrated localised abdominal tenderness with guarding. Laboratory investigations revealed leukocytosis with neutrophilic predominance. Plain abdominal radiography demonstrated a radiopaque, sharp metallic foreign body within the lower abdomen. Owing to worsening abdominal pain and increasing clinical suspicion of bowel perforation, emergency exploratory laparotomy was performed. Intraoperatively, a localized small-bowel perforation caused by the sharp metallic object was

identified, with surrounding inflammatory adhesions and localized peritoneal contamination. The foreign body was successfully removed, the bowel perforation was repaired primarily, and the peritoneal cavity was thoroughly irrigated. The postoperative recovery was uneventful. Oral feeding was resumed gradually, and the patient was discharged in satisfactory condition.

DISCUSSION

Foreign body ingestion is a common clinical problem worldwide and accounts for a substantial proportion of emergency surgical and gastroenterological admissions. Although the majority of cases occur accidentally in children, adult foreign body ingestion presents unique diagnostic and therapeutic challenges because it is frequently intentional and involves objects with a greater potential for gastrointestinal injury. Approximately 80–90% of ingested foreign bodies pass spontaneously through the gastrointestinal tract, whereas 10–20% require endoscopic intervention and fewer than 1% require surgery.^{1,2} These figures, however, largely reflect heterogeneous populations comprising blunt objects, food boluses, dentures, coins, batteries, and fish bones rather than sharp metallic foreign bodies.^{3,4}

International guidelines published by the American Society for Gastrointestinal Endoscopy (ASGE) and the European Society of Gastrointestinal Endoscopy (ESGE) recommend that management should be based primarily on the characteristics and anatomical location of the ingested foreign body rather than on the patient's symptoms alone.^{5,6} Sharp-pointed metallic objects are considered high-risk because they possess a substantially greater potential for perforation than blunt foreign bodies and therefore require close observation and, whenever accessible, urgent endoscopic removal.^{5,6} Intentional foreign body ingestion in adults is traditionally associated with psychiatric illness, intellectual disability, substance abuse, eating disorders, or institutionalized populations.^{3,7,8} Consequently, most published series describe recurrent episodes of ingestion in these patient groups. Our study differs from previously published reports because all ten patients were mentally competent young adults without documented psychiatric illness or cognitive impairment. This distinctive clinical profile emphasizes that deliberate ingestion of sharp metallic foreign bodies may also occur in psychologically normal individuals and should not automatically be attributed to psychiatric disease. Careful clinical assessment and individualized management therefore remain essential regardless of the underlying motivation for ingestion.

Large clinical series have demonstrated that food boluses constitute the commonest foreign body in adults, followed by fish bones, chicken bones, dentures, coins, and miscellaneous metallic objects.^{9,22,23} In contrast, eight of the ten patients (80%) in the present study ingested sewing needles, while the remaining two ingested a metallic clip and another sharp metallic object, respectively. The predominance of sewing needles distinguishes our series from most published reports and explains the relatively high incidence of bowel perforation observed. Sharp metallic objects possess pointed ends capable of penetrating the gastrointestinal wall, particularly at physiological narrowing such as the pylorus, duodenojejunal flexure, terminal ileum, ileocecal junction, and rectosigmoid colon.^{10–14}

The clinical presentation of sharp metallic foreign body ingestion is often variable and may not accurately reflect the severity of gastrointestinal injury.^{13,14} In the present series, abdominal pain was the predominant symptom, occurring in 60% of patients, whereas two patients remained entirely asymptomatic despite documented ingestion of sewing needles. Similar observations have been reported previously, demonstrating that significant bowel injury may occur in the absence of dramatic clinical findings.^{13,24} Therefore, clinicians should maintain a high index of suspicion whenever ingestion of a sharp metallic object is confirmed, even in apparently asymptomatic patients.

Radiological evaluation forms the cornerstone of diagnosis and subsequent management. Plain abdominal radiography remains the preferred initial investigation for metallic foreign bodies because it is inexpensive, readily available, rapidly performed, and highly sensitive for radiopaque objects.^{15,21} In our study, plain radiographs successfully identified and localized the foreign body in every patient. Furthermore, serial radiographic examinations accurately documented distal migration during conservative treatment and enabled early identification of patients in whom progression had ceased. Similar findings have been reported in previous observational studies supporting serial radiography as the principal imaging modality during follow-up of metallic foreign body ingestion.^{15,21,26}

Computed tomography (CT) has emerged as the most accurate imaging modality for evaluating complicated foreign body ingestion. Unlike conventional radiography, CT provides precise localization of the foreign body and simultaneously identifies bowel wall thickening, pneumoperitoneum, inflammatory changes, localized abscesses, and extra-luminal migration.^{16,17} Previous studies have demonstrated diagnostic sensitivities exceeding 90% for CT in patients with gastrointestinal perforation caused by

ingested foreign bodies.^{16,17} Although CT was not routinely required in our patients because plain radiographs adequately localized the metallic foreign bodies, it remains indispensable whenever perforation or abscess formation is suspected.

Endoscopy represents the treatment of choice for sharp foreign bodies located within the esophagus, stomach, or proximal duodenum. Endoscopic retrieval achieves success rates exceeding 95% while minimizing the risk of gastrointestinal perforation and unnecessary surgery.^{11,12,15} International guidelines therefore recommend urgent endoscopic removal of all accessible sharp-pointed foreign bodies before distal migration occurs.^{5,6} Once the object progresses beyond the proximal small intestine, however, endoscopic retrieval becomes technically difficult, and management must be guided by serial clinical assessment and radiological follow-up.

Conservative management was successful in eight patients (80%) in the present series. Progressive distal migration was demonstrated on serial radiographs, followed by spontaneous passage of the foreign body without complication. These findings are consistent with previous studies reporting that the majority of sharp foreign bodies passing beyond the duodenum may be managed safely with close observation, provided the patient remains clinically stable and serial imaging confirms progression.^{4,10,28,29} Our experience supports this selective approach and suggests that the presence of a sharp metallic object alone should not automatically mandate surgical exploration.

Despite successful conservative treatment in most patients, two patients (20%) developed bowel perforation with localized peritonitis requiring emergency exploratory laparotomy. Although this operative rate is higher than the <1% surgical rate reported in heterogeneous adult series,^{1,3,9} it reflects the exclusive inclusion of sharp metallic foreign bodies in our cohort. Sharp-pointed objects are well recognized to carry perforation rates approaching 35%, particularly when endoscopic retrieval is not feasible.^{13,14,18,20} Both patients in our series underwent timely laparotomy with successful retrieval of the foreign body, primary repair of the bowel, and uncomplicated postoperative recovery. Operative findings in our study were consistent with previously published surgical reports describing localized small bowel perforation associated with limited peritoneal contamination.^{18,20} Local inflammatory adhesions surrounding the perforation frequently prevent generalized fecal peritonitis and facilitate successful primary repair when surgery is performed promptly. Early recognition of deteriorating clinical signs, combined with serial imaging, probably contributed to the absence of

mortality and major postoperative morbidity in our series.

Comparison of our findings with previously published studies reveals several noteworthy observations. Unlike large heterogeneous series, our patients were uniformly young adults with ingestion of exclusively sharp metallic foreign bodies. Consequently, the rate of spontaneous passage (80%) remained comparable with published literature, whereas the operative rate (20%) was predictably higher because of the increased perforation risk associated with sewing needles. Nevertheless, complete recovery was achieved in every patient, emphasizing that adherence to evidence-based management principles can produce excellent outcomes even in patients with potentially hazardous foreign bodies.^{25,26,27}

The principal strengths of the present study include a homogeneous patient population, standardized clinical assessment, uniform radiological follow-up, and complete outcome documentation for all ten patients. Unlike previous reports that combined blunt and sharp foreign bodies or included heterogeneous psychiatric populations, our series specifically evaluates deliberate sharp metallic foreign body ingestion in mentally competent young adults, a subgroup that remains poorly represented in current literature.

Several limitations should also be acknowledged. The retrospective nature of the study introduces the possibility of information bias, while the relatively small sample size reflects the rarity of this clinical presentation. In addition, the experience of a single tertiary referral centre may limit the generalizability of the findings. Nevertheless, because deliberate sharp metallic foreign body ingestion in mentally competent adults is uncommon, this series contributes meaningful evidence regarding presentation, imaging, treatment strategies, and clinical outcomes.

Future multicentre prospective studies involving larger patient populations are required to establish validated predictors of conservative management failure, determine the optimal frequency of radiological follow-up, and refine surgical indications for sharp metallic foreign body ingestion. Development of standardized management algorithms based upon object characteristics, anatomical location, radiological progression, and patient symptoms may further improve outcomes while reducing unnecessary surgical intervention.²⁵⁻³⁰

CONCLUSION

Deliberate ingestion of sharp metallic foreign bodies in mentally competent young adults is an uncommon but clinically significant condition that poses important diagnostic and therapeutic challenges.

Although sharp foreign bodies carry a higher risk of gastrointestinal perforation than blunt objects, the present series demonstrates that most clinically stable patients can be managed successfully with careful observation, serial abdominal examinations, and radiological follow-up.

In this series of ten consecutive patients, conservative management was successful in 80% of cases, while 20% required exploratory laparotomy because of bowel perforation and localized peritonitis. Importantly, all patients recovered completely without mortality or major postoperative morbidity. These findings emphasize that management should be individualized according to the patient's clinical condition, radiological progression of the foreign body, and development of complications rather than the mere presence of a sharp metallic object.

Plain abdominal radiography remains the cornerstone of diagnosis and follow-up for radiopaque metallic foreign bodies, whereas computed tomography should be reserved for patients with suspected perforation or equivocal findings. Prompt surgical intervention remains lifesaving in patients who develop bowel perforation, obstruction, or generalized peritonitis. Our study contributes valuable evidence regarding the management of deliberate sharp metallic foreign body ingestion in mentally competent adults, a population that remains underrepresented in the existing literature. Larger multicentre prospective studies are required to establish validated risk stratification models and standardized management algorithms for this uncommon clinical entity.

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Conflict of Interest

The authors declare **no conflict of interest** related to this study.

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TABLE

Variable	Value
Total patients	10
Male	10 (100%)
Female	0
Mean age (years)	20.1 ± 1.7
Age range	18–23 years

Table 1. Demographic Characteristics of the Study Population

Variable	Number (%)
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Sewing needle	8 (80%)
Metallic clip	1 (10%)
Other sharp metallic objects	1 (10%)
Abdominal pain	6 (60%)
Vomiting	1 (10%)
Asymptomatic	2 (20%)
Conservative management	8 (80%)
Exploratory laparotomy	2 (20%)
Bowel perforation	2 (20%)
Mortality	0
Complete recovery	10 (100%)

Table 2. Clinical Presentation and Management

Case	Foreign body	Radiological location	Treatment	Outcome
1	Sewing needle	Central abdomen	Laparotomy	Recovered
2	Sewing needle	Large bowel	Conservative	Passed spontaneously
3	Sewing needle	Small bowel	Laparotomy	Recovered
4	Sewing needle	Small bowel	Conservative	Passed spontaneously
5	Metallic clip	Rectum	Conservative	Passed spontaneously
6	Sewing needle	Small bowel	Conservative	Passed spontaneously
7	Metallic clip	Large bowel	Conservative	Passed spontaneously
8	Sewing needle	Small bowel	Conservative	Passed spontaneously
9	Sewing needle	Small bowel	Conservative	Passed spontaneously
10	Sharp metallic object	Large bowel	Laparotomy (peritonitis)	Recovered

Table 3. Distribution of Foreign Bodies and Clinical Outcome

PHOTOGRAPHS

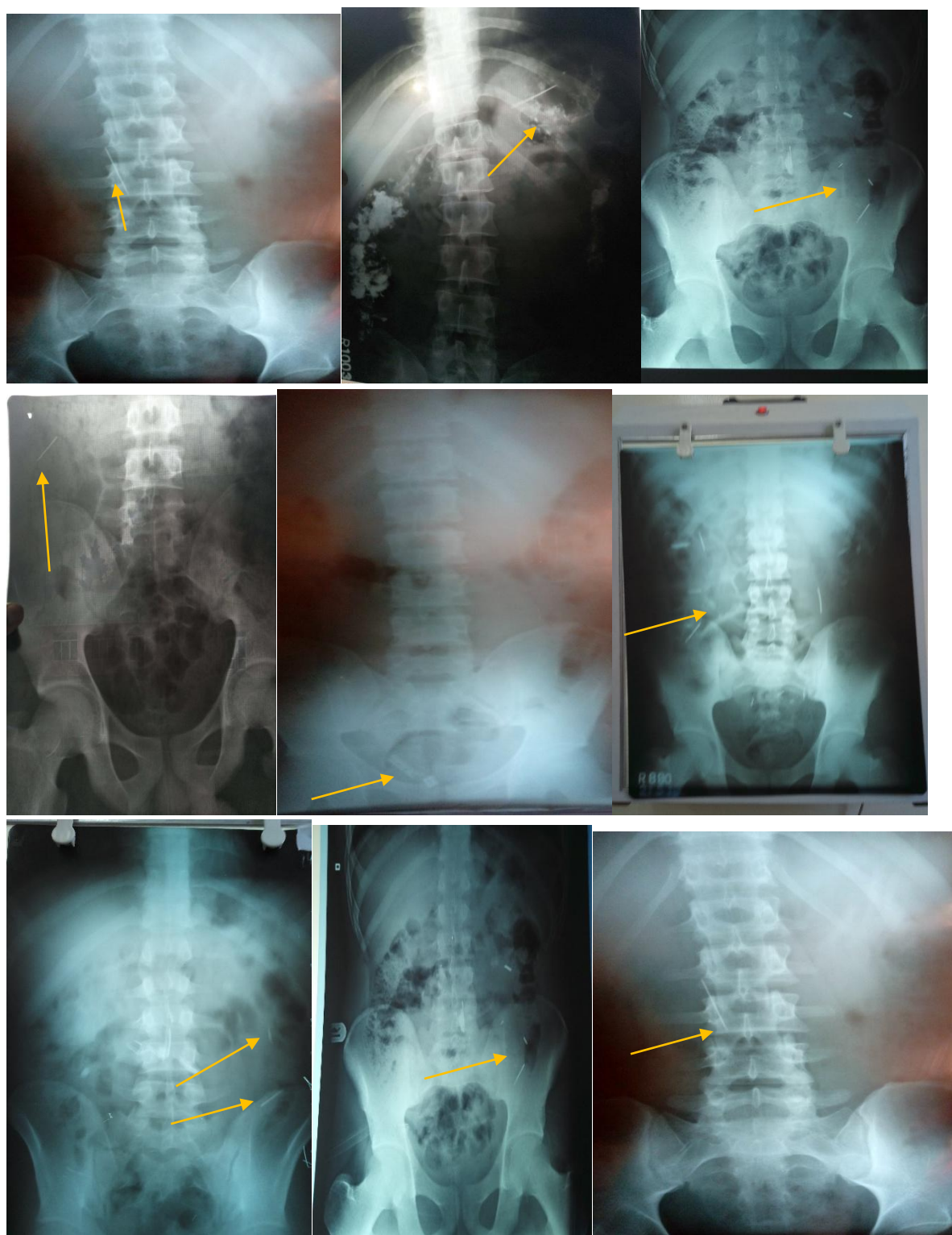


Figure 1: Xrays of abdomen of different cases indicating radiopaque sharp foreign bodies within bowel



Figure2: Intra-opimages showing retrieval of sharp FB



Figure3: Spontaneous passed FB through stool pieces of shaving blade and metallic clips