

## Copper-T Migration into Stomach: A Laparoscopic Management

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### About the Author



**Anju Kumari Rani** did M.D. (obstetrics & Gynecology) in 1994 and Senior Residency from K.G.M.C., Lucknow. Soon after finishing her Senior Residency, she joined the Institute S.G.P.G.I.M.S., Lucknow as a specialist in 1997 and currently working as Senior Consultant at General Hospital, S.G.P.G.I., Lucknow. Since SGPGIMS is a superspeciality hospital, she is managing a lot of complicated, atypical referral cases to this hospital. She has been involved in Clinical Grand Round (CGR), Telemedicine sessions, medical board, and other institute responsibilities. She had also got an opportunity to work as Registrar for approximately 1 year at a tertiary referral teaching hospital, Liverpool, Sydney, Australia

### Introduction

Extra uterine migration of copper-T, an intrauterine contraceptive device (IUCD), is well reported in the literature. In most cases, it is a chronic form of migration to the

nearby structure [1]. Visceral migration to bladder, rectum, sigmoid colon, caecum, appendix, small bowel, and iliac vessels has also been reported [2]. Recently, we encountered a case of translocation of copper-T into the stomach, a condition which otherwise would appear to beat imagination.

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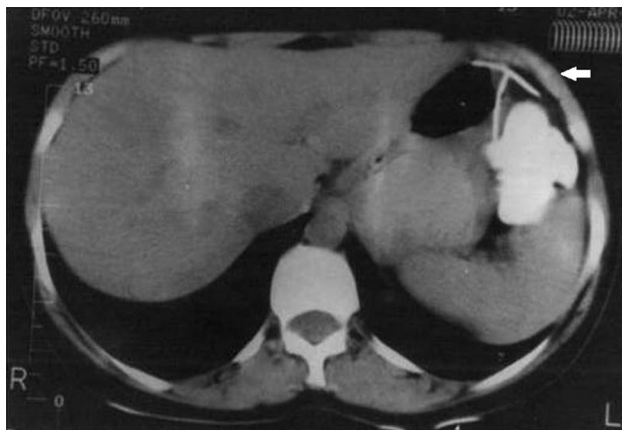
### The Case

A 34-year-old mother of one child came to gynecology OPD for removal of the copper-T inserted 1 year back. Examination revealed missing copper-T thread, and it was presumed that the copper-T had slipped out. In the next 4 months, she experienced dull aching pain in left upper quadrant with occasional radiation to the back requiring analgesics for relief. She presented to us, an X-ray of the



**Fig. 1** Plain X-ray abdomen showing displaced Cu-T device in left hypochondrium

dorsolumbar spine was advised, which revealed the presence of the lost copper-T in the left hypochondrium (Fig. 1). A contrast-enhanced CT scan of abdomen carried out for precise location of copper-T before its removal showed copper-T in intraperitoneal location between greater curvature of stomach and splenic flexure (Fig. 2). Laparoscopic removal of the device was planned. Laparoscopy through a 10-mm infraumbilical port revealed the vertical limb of the of the device buried into the greater curvature of the stomach with the horizontal limb lying parallel to the greater curvature and abutting it wrapped in the greater omentum. With the help of another 10-mm right subcostal port and 5-mm left paraumbilical port, the stomach was retracted, and projecting end of the device was grasped and dissected free from the omentum. The



**Fig. 2** CECT abdomen showing dislocated Cu-T

copper-T was pulled out with some difficulty. The defect in gastric wall was secured with an endo-GIA stapler and a suction drain put. The patient made an uneventful recovery and was discharged on third postoperative day.

## Discussion

Translocation of copper-T from uterus to the stomach is one of the rarest complications. The possible route may be intraperitoneal migration after perforation of the uterus. The entry of its limb to the stomach might be due to entrapment in that area, foreign body reaction with abscess formation and subsequent erosion into the stomach.

The symptoms of viscerally migrated copper-T are vague. On retrospective questioning, our patient informed that the pain was maximum on full stomach. It could be because of parietal peritoneal irritation. These symptoms, coupled with the psychological stress created by the knowledge of migrated copper-T in abdomen, led us to intervene before any further complication could supervene.

The increasingly reported success with advanced laparoscopic surgery in managing migrated IUCD makes it a better bet than open surgery with its added advantages of reduced pain, shorter post operative stay, better cosmesis, and patient compliance.

The success of laparoscopic removal of viscerally migrated copper-T greatly depends on its precise location and experience of the surgeon. We feel that CECT is a better adjunct to plain X-ray for precise location and to establish its relationship to adjacent organs and vessels, which could influence the laparoscopic technique.

## Conclusion

This unusual experience with copper-T only reinforces the fact that IUCDs can migrate to any site in the abdomen. Regular self checking and timely effort by doctor to localize a missing device can prevent further migration to unusual sites. Viscerally, migrated copper-T can safely and successfully be removed by laparoscopy.

**Conflict of interest** There is no conflict of interests.

## References

1. Amin U, Mohamad R. Unusual location of copper T within perivesical inflammatory mass. *PJR*. 2010;20(1):20–2.
2. Ozgür A, Sismanoglu A, Yazici C, et al. Intravesical stone formation on intrauterine contraceptive device. *Int Urol Nephrol*. 2004;36(3):345–8.