

## Use of Magnet in Removal of Retained Metallic Foreign Bodies

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Retained foreign bodies are a usual presentation to surgical emergency department. Most of the times these foreign bodies are of metallic nature. Although most foreign bodies are never harmful, they have to be removed when they cause pain, neurologic symptoms, vascular compression, function loss, sterile abscesses or granulomas, and infection. Also they lead to lot of apprehension to the patient making another indication for its removal. Removal, if not done immediately can be tricky because of following reasons:

- The foreign body can migrate along subcutaneous and fascial planes to adjacent structures. And the entry point might not be a good indicator of position of the foreign body.
- X-rays are not able to give an accurate three-dimensional position.
- Defense mechanism of the body to the foreign body cause invasion of inflammatory cells leading to granuloma formation, and the object may hide itself in the healing tissue.

At Several occasions the surgeon keeps struggling and end up doing more harm than good to the patient. Such experiences have forced us to make it a rule that "most foreign bodies should be left as such and any attempt to remove them will lead to greater damages".

However we in Maulana Azad Medical College, use a simple yet effective method, which has proved to be of great help in such cases. The method is to use a magnet to help in localizing and identifying the metallic foreign body. The highly accurate method enables us to remove foreign bodies with a smaller incision and minimal dissection.

Method: After proper clinical evaluation,

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radiological confirmation and proper consent, the metallic body is localized using a hand held magnet. Incision is marked at site closest to the location. The part is cleaned and draped and incision of size appropriate to the foreign body is made. The dissection is further aided by magnet, wrapped in a sterile glove/cloth piece. After removal of foreign body, it is matched with the X- ray, to confirm complete removal. The wound is then closed and sterile dressing is done.



Fig. 1:

### Conclusion

Magnet is a very cheap and simple instrument for removal of metallic foreign body anywhere in the body. Hence it is a very important tool in the armamentarium of surgeons. As with any other tool, it should be used wisely.