

Case Report: Pilonidal sinus - An unusual cause of umbilical swelling

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Case presentation

A 29 year old male presented with a seven day history of abdominal pain associated with peri-umbilical swelling. He described a constant aching pain in his umbilical region spreading around his abdomen which worsened when he lay on his side. The swelling was noticed two days after the onset of symptoms. He was generally well apart from a reduced appetite and he had no bowel or urinary symptoms. Past medical history was unremarkable. On examination he was haemodynamically stable and afebrile. Abdominal palpation elicited marked para-umbilical tenderness with some guarding; a hard para-umbilical swelling was noted which did not have a cough impulse. Blood tests and X-rays were unremarkable.

An initial diagnosis of incarcerated or strangulated para-umbilical hernia was made, and the patient taken to theatre. A transverse supra-umbilical incision was made and purulent discharge was noted. This was explored and hairs were found at the base of the cavity suggesting an infected umbilical pilonidal sinus. There was a small para-umbilical hernia but this was felt to be an incidental finding. The skin over the abscess cavity was excised and the pus drained. Washout was then performed and the umbilicus curetted before being packed with Kaltostat. The para-umbilical hernia was found to contain omentum; it was repaired with four interrupted number 1 nylon sutures. The patient was discharged home the following day. He had a follow-up appointment four weeks later, at which time the wound had healed well with no evidence of ongoing infection or recurrence

Discussion

There are many causes of umbilical pain and swelling including hernia, cystic lesions, metastatic disease, endometriosis and congenital

abnormality¹. This case demonstrates that pilonidal sinus is a possibility which must be considered, and which requires a different approach to management.

Pilonidal sinus disease is caused by a granulomatous inflammatory reaction to hairs penetrating the epidermis from external surfaces. It characteristically affects young males and most commonly occurs in the sacro-coccygeal region. Umbilical pilonidal sinus disease is much rarer but there are several small studies and case reports in the literature. It is generally assumed to be acquired², with hirsutism being the main predisposing factor, along with young age, male sex, a deep navel and poor hygiene².

Initial treatment consists of drainage of an abscess, followed by either conservative treatment³ or a definitive operation^{2,4,5} which may involve excising and reconstructing or preserving the umbilicus. A substantial number of cases treated conservatively will resolve^{1,3} and it has been recommended that surgery should only be undertaken once conservative management has failed¹. However, modern surgical techniques where the umbilicus is preserved are producing good results^{4,5}.

If there had been a large hernia found and a mesh required for repair, this would have been performed at a later date to avoid chronic infection.

Conclusion

Pilonidal sinus is a rare cause of umbilical swelling but it is an important one to be aware of - especially in young male patients. It is important to recognise, as treatment differs from that used to treat other, more common causes of umbilical swelling, but good results can be obtained by appropriate surgical management.

References:

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