

Identical Twins presenting with Identical Ovarian Neoplasm

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Abstract

It is said that our fate is determined by our genes.

When identical (monozygotic) twins present with identical pathology, we are more convinced of that premise.

We present a pair of **identical (monozygotic) twins** who both had **dermoid cysts (mature cystic teratomas)** that were discovered and treated in the same year.

Case Presentation

The first patient, 21 years old, presented with abdominal pain and had an emergency laparoscopic left ovarian detorsion and cystectomy for a twisted ovarian dermoid cyst in May 2017. Her twin sister underwent screening sonography, was detected to have a left dermoid cyst, and underwent elective laparoscopic cystectomy in December 2017.

Discussion

Dermoid cysts are the most common type of ovarian neoplasm, occurring in 30–40% of cases. The majority of them are benign. However, surgical treatment is often required due to the **increased risk of torsion and rupture**. As they often happen in young women, such complications have far-reaching implications, especially on **future fertility**.

Hence, early detection and laparoscopic resection is key to the management of dermoid cysts. We studied two publications that reported dermoid cysts occurring in identical twins. The younger pair was 12 years old when they first presented, with one having immature teratoma Grade 1 (FIGO Stage 1). The older pair was 32 years old when one of them first presented with cyst on cancer screening, and the other twin's cyst was discovered during investigation for infertility. A third publication reported dermoid cysts in three generations along the maternal line. With a paucity of reported cases, the etiology of dermoid cysts can be either spontaneous or genetic. Whether identical twins are more likely to develop dermoid cysts remains speculative. However, it would be reasonable to screen the other identical twin for ovarian neoplasm when one twin presents with the disease.

Conclusion

We recommend **screening for dermoid cyst in identical twins** as young as 12 years old because of the possibility of early presentation and risk of immature teratomas.

References

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