Images

Ocular structures in a mature ovarian teratoma

R. Allan Sharpe⁷⁸, Cynthia T. Welsh⁹, Lynn J.P. Perry⁸
⁷ Department of Ophthalmology, Storm Eye Institute, Medical University of South Carolina, Charleston, SC, USA
⁹ Department of Pathology and Laboratory Medicine, Medical University of South Carolina, Charleston, SC, USA

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1. Case report

A 42-year-old otherwise healthy Asian woman underwent laparoscopic excision for a persistent left adnexal mass with an ultrasonographic appearance of an ovarian dermoid cyst. Histologic examination of the entire specimen revealed cheesy material and hair consistent with a mature ovarian teratoma. Further examination revealed several ocular structures. Fig. 1A shows hematoxylin and eosin stained portion of the teratoma at low magnification. The cystic structure with a single layer of epithelial cells is suggestive of primordial lenticular development (Fig. 1A inset). In addition, more differentiated ocular structures including corneal epithelium and conjunctiva with prominent goblet cells are noted at the surface of the specimen (Fig. 1B).

2. Discussion

Multiple prior reports have described retinal and choroidal structures in mature teratomas.¹,² However, few have previously described corneal, conjunctival, and lenticular tissue, which are most commonly seen as part of a fully formed eye within a teratoma.¹,² This image reveals the first-reported, isolated corneal and conjunctival tissue with developing lenticular structures in a mature ovarian teratoma.

3. Conclusion

This case reveals the first-reported, isolated corneal and conjunctival tissue with developing lenticular structures in a mature ovarian teratoma.

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Conflicts of interest

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Authorship

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Appendix A. Supplementary data

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References


Fig. 1. Hematoxylin and eosin stain of a mature ovarian teratoma with ocular structures (40x) with inset (200x) highlighting a layer of epithelial cells surrounding an eosinophilic cystic cavity suggestive rudimentary lens capsule. Fig. 1B (200x): Transition from conjunctival (C) to corneal epithelium (K).