

Minimally Invasive Surgery for Malignant Ovarian Germ Cell Tumors in Children and Adolescents: A Single-Center Experience with Fertility-Preserving Surgery and Surgical Outcomes

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BACKGROUND

Malignant ovarian germ cell tumors (MOGCTs) account for the most common ovarian malignancies in the pediatric population. By reducing tumor burden prior to surgery, NACT can facilitate complete resection (R0), decrease operative complexity, minimize surgical morbidity, and increase opportunities for minimally invasive fertility-preserving procedures.

Primary Objective

To evaluate the feasibility, safety, and oncological adequacy of minimally invasive fertility-preserving surgery for malignant ovarian germ cell tumors in children and adolescents.

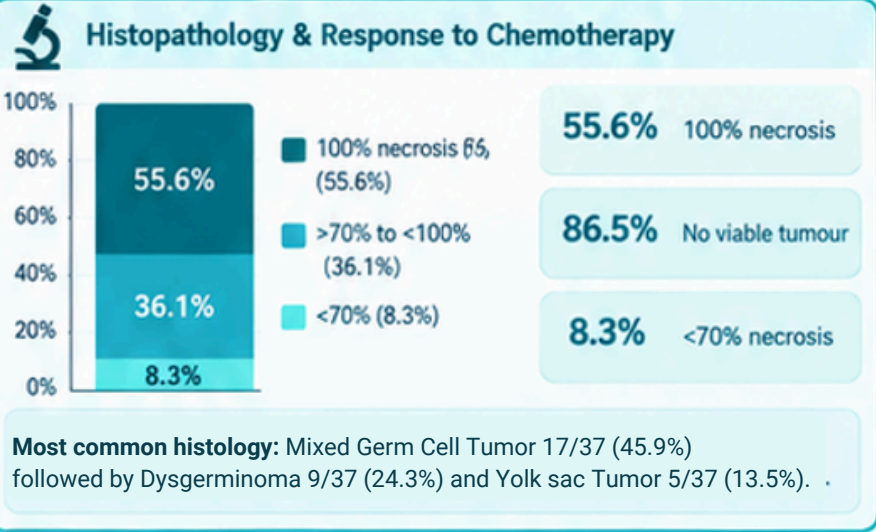
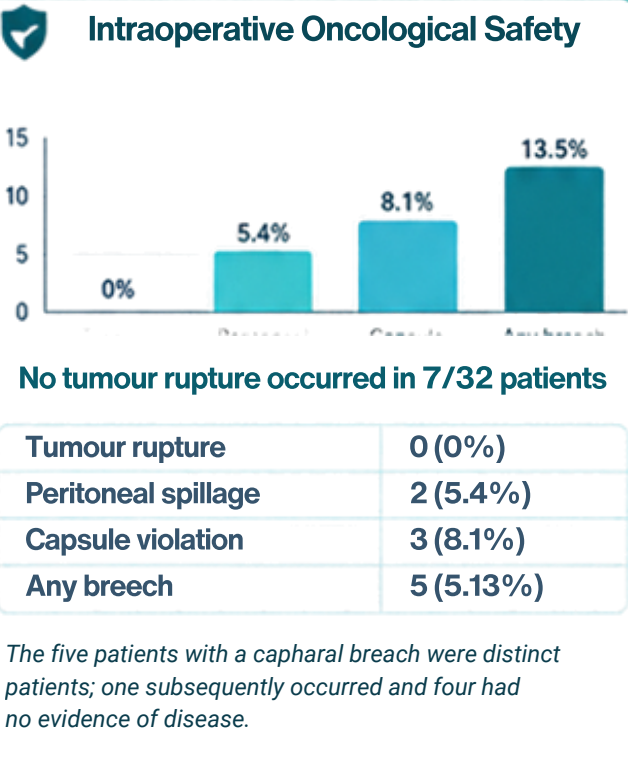
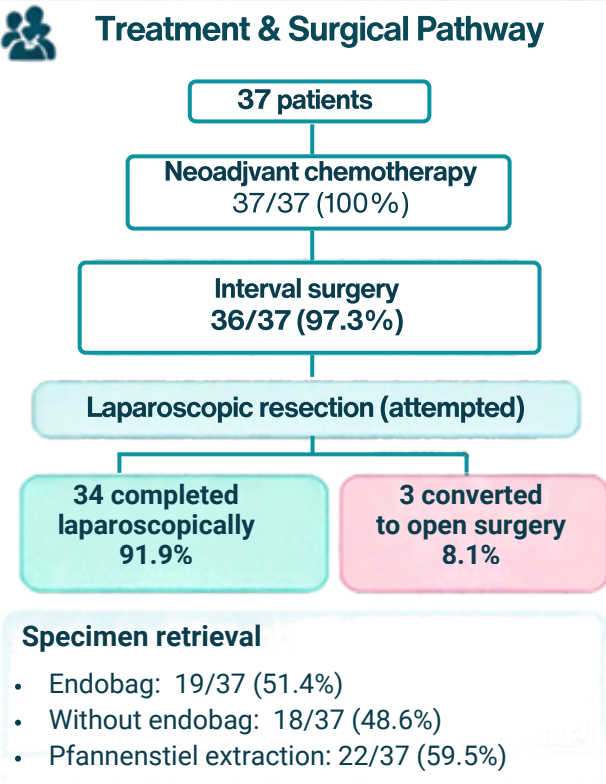
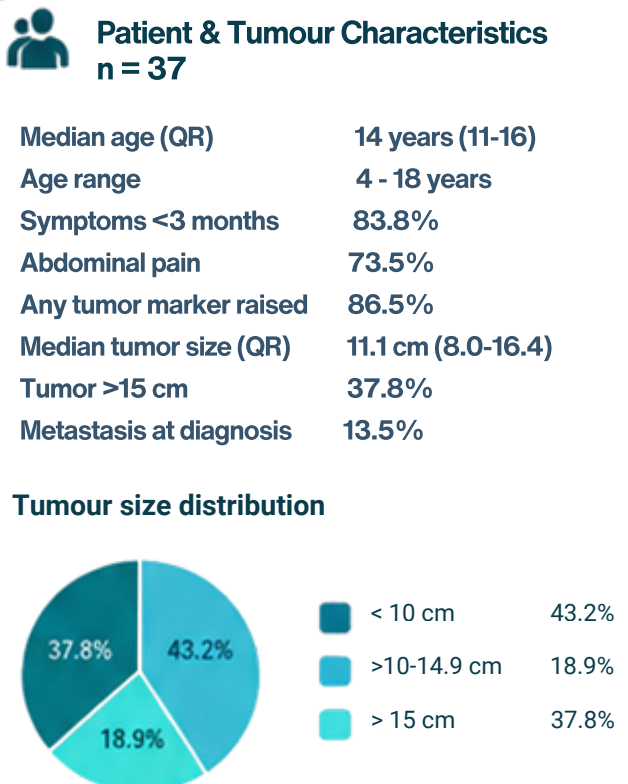
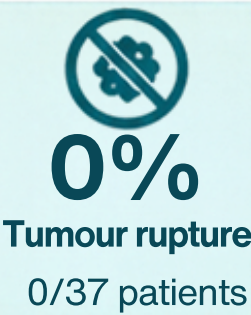
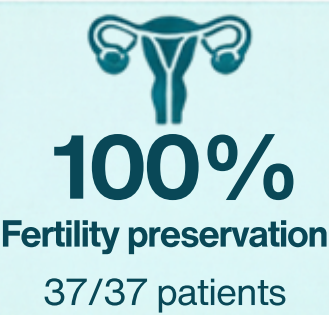
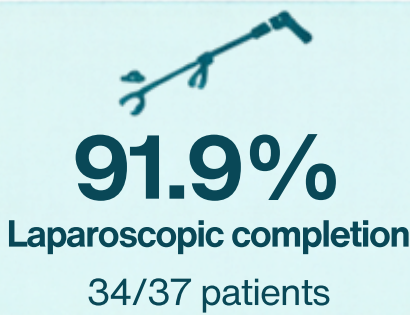
Methodology

Retrospective Cohort Study
Setting: Shaukat Khanum Memorial Cancer Hospital and Research Centre | Lahore
Duration: January 2021 - June 2026
Sampling Techniques: Consecutive Sampling

Conclusion

Minimally invasive surgery for fertility preservation is feasible and safe in carefully selected pediatric and adolescent MOGCT patients with high laparoscopic completion and no tumor rupture.

RESULTS





Factors Associated with Disease-Free Status		
Factor	Disease-free (n/N, %)	p-value
100% necrosis	19/20 (95.0%)	0.030
<100% necrosis	10/16 (62.5%)	
No metastasis	28/32 (87.5%)	0.037
Metastasis present	2/5 (40.0%)	



References