

Audit of complications from diaphragmatic peritonectomy in debulking surgery for advanced tubo-ovarian cancer.

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Introduction

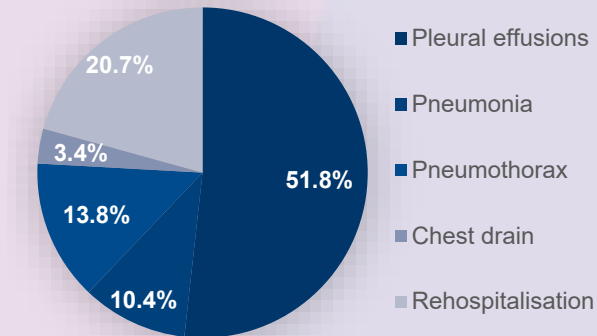
Optimal cytoreductive surgery is associated with improved outcomes in patients diagnosed with tubo-ovarian cancer. As the majority of the patients present with advanced disease, upper abdominal surgery, which includes diaphragmatic peritonectomy, may be required to achieve this. There have been a few studies^(1,2,3) published in the literature assessing the complications and post-operative morbidity associated with performing diaphragmatic peritonectomy during cytoreductive surgery.

Aims

To determine the complications and post-operative morbidity associated with performing diaphragmatic peritonectomy during cytoreductive surgery for tubo-ovarian cancer.

Methods

Patients were identified using a key word search on the hospital theatre management system. The operation note was then analysed for inclusion and exclusion criteria. Once identified as a case for inclusion, the clinical record was examined to identify complications. The demographic data was also recorded, including age of patient, whether this was a primary or an interval cytoreductive surgery, the grade of tumour, the stage of cancer, histology type, side of the diaphragm where peritonectomy was performed and macroscopic residual disease.

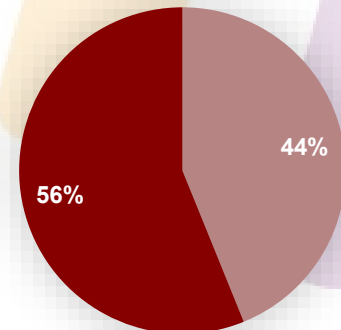


Results

A total of 38 patients underwent diaphragmatic peritonectomy as part of their cytoreductive surgery between December 2011 and September 2021. 8 patients were excluded as their final histopathology was reported as cancers of not tubo-ovarian origin. Of the 30 patients included in the final analysis, 17 (56.7%) patients were identified as having post-operative complications. 15 (50%) of these patients developed pleural effusion, which was the most common complication. Rehospitalisation within 6 weeks occurred in 6 patients. 4 patients were admitted with a diagnosis of pneumothorax, 3 had pneumonia and only 1 required a thoracocentesis. The data presented here was collected across a 10-year time period. During this time period the definition of optimal cytoreductive surgery had changed to nil macroscopic residual disease. In our series 5 patients had suboptimal cytoreductive surgery where the residual was greater than 1cm. The other 25 patients had optimal cytoreductive surgery with residual disease less than 1cm.

Discussion

This audit demonstrates diaphragmatic peritonectomy can be safely performed during cytoreductive surgery in an established Gynaecology Oncology unit. Performing diaphragmatic peritonectomy can help achieve optimal debulking during surgery. The most common complication was pleural effusion and only one patient required a thoracocentesis.



References

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3. Chéreau E, Rouzier R, Gouy S, Ferron G, Narducci F, Bergzoll C, Huchon C, Lécureu F, Pomel C, Daraï E, Leblanc E. Morbidity of diaphragmatic surgery for advanced ovarian cancer: retrospective study of 148 cases. *European Journal of Surgical Oncology (EJSO)*. 2011 Feb 1;37(2):175-80.