



Serous effusions and peritoneal washings

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Summary

- The main role of serous fluid cytology is to diagnose malignancy, as serous cavities are commonly involved in cancer.
- Correlation between cytological findings and clinical history is important in reaching a correct diagnosis.
- It is generally not possible to deduce the cause of most benign effusions from the cytological features; however, in rheumatoid disease and systemic lupus erythematosus there are typical cytological features which help in indicating the specific cause.
- Malignant cells in serous fluids are more commonly due to metastatic malignancy than to mesothelioma (primary malignant tumour of the mesothelium).
- The relative frequency of involvement by metastatic malignancy differs according to age, sex, and serous cavity.
- In a proportion of cases, the effusion may be the presenting feature of malignant disease. In these cases immunocytochemistry may be helpful in providing a definitive diagnosis of primary tumour.
- Most malignant mesotheliomas initially present with serous effusion.
- Cells from a malignant mesothelioma show diverse cytological features. Once the diagnosis of malignancy is established immunocytochemistry may be helpful in confirming the mesothelial nature of the cells.
- Finding of malignant cells in peritoneal washings is used to stage ovarian, fallopian tube, and peritoneal cancers.