

Utility of Cytology in the Diagnosis of Parasitic Infestation – A Series of four cases

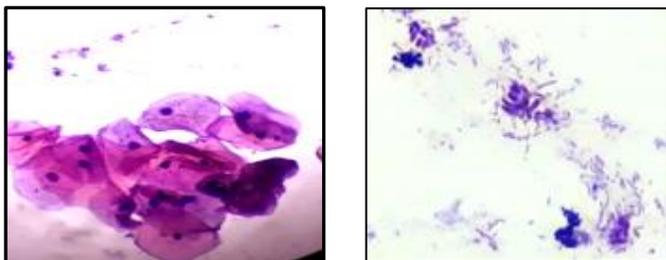
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INTRODUCTION

Parasitic infestation is one of the serious health problems encountered in developing countries. It presents as asymptomatic or nodular swellings which are often misdiagnosed as neoplasm or lymphadenitis depending on the site. FNAC and fluid cytology have proved propitious for evaluation of such cases.

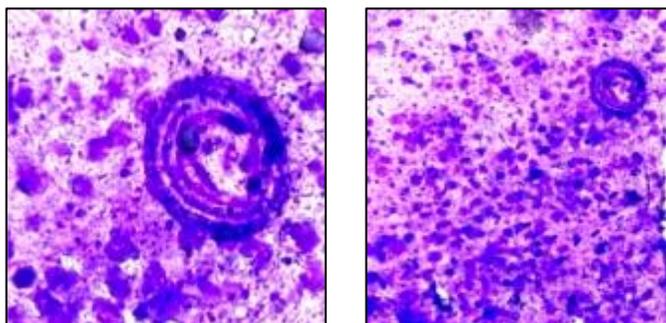
CASE REPORTS

CASE 1 - 43yrs old female, presented with complains of lower abdomen pain and discharge per vaginum . She was a follow up case of chronic cervicitis. On PAP smear numerous safety pin structures were seen (Donovan bodies) along with superficial and intermediate squamous epithelial cells. Few endocervical and squamous metaplastic cells displaying binucleation and multinucleation were also seen in a background of dense inflammation and mucus. Findings were in favour of Donovanosis.



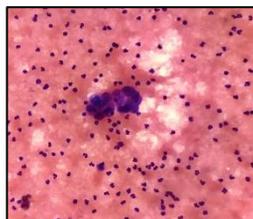
Safety pin structures (Donovan bodies) seen along with superficial and intermediate cells

CASE 2- 26yrs old female presented with Right breast swelling since 1 month hich was painful. On examination swelling was firm, mobile, non-tender, in upper outer quadrant and 1 x 1 cm in size. On FNAC spirally coiled organisms were seen in a background of dense inflammation, suggestive of Granulomatous lesion probably due to *Trichinella spiralis*.

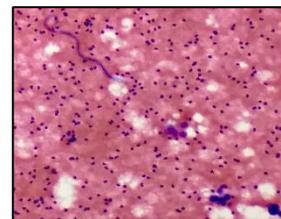


Spirally coiled organisms (*Trichinella spiralis*) in a background of dense inflammation

CASE 3- 50yrs old male, who was admitted with severe dyspnea and chest pain since 7 days. Echocardiogram showed massive pericardial effusion with tamponade. Pericardial fluid aspiration drained 2.5 L of hemorrhagic fluid. Cytology examination done revealed microfilaria of *Wuchereria bancrofti*.

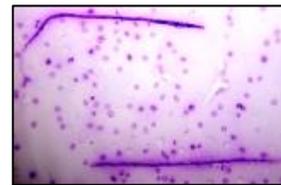


Pericardial fluid cytology showing atypical cells arranged in acinar pattern.



Pericardial fluid cytology showing microfilariae along with atypical cell arranged in acinar pattern and few inflammatory cells against a blood mixed background.

CASE 4 - 30yrs old male presented with vague abdominal lump. Rapid on site evaluation of USG guided FNAC revealed numerous thread like organisms identified as adult filarial worms upon staining



Showing microfilariae along with few inflammatory cells

DISCUSSION & CONCLUSION

Cytological examination is rapid, efficient and less cumbersome technique for evaluation of parasitic infestation. These diagnostic modalities help in early diagnosis of parasitic infestations especially in unsuspected cases and also curtail meticulous surgeries and whip up the role of medical management.

REFERENCES

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