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Well Differentiated Papillary Mesothelioma Of Pleura: Cytodiagnosis Of A Very Rare Case Report.

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ABSTRACT

Well differentiated Papillary Mesothelioma (WDPM) is a rare neoplastic proliferation of mesothelial cells. It is commonly diagnosed in young women as a peritoneal neoplasm. In rare cases WDPM arises from pleura on tunica vaginalis. We reported a rare case of Well differentiated Papillary Mesothelioma arising from pleura in a 48-year-old male. Pleural fluid cytosmears and cell block study showed features of Well differentiated Papillary Mesothelioma. Most of the cases have a benign outcome with very low recurrence rate.

Keywords: Cell Block, FNAC, Papillary Mesothelioma, Pleura

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INTRODUCTION

Well differentiated Papillary Mesothelioma (WDPM) is a neoplastic mesothelial proliferation of Low Malignant Potential, which predominantly involves the peritoneum of young women.[1] Mesothelioma involves pleura and tunica vaginalis in rare cases [2,3]. Exposure to Asbestos i reported in only ~ 1 % cases [1].

Most of the cases were diagnosed incidentally. Papillary mesotheliomas arising from the pleura have a higher rate of asbestos exposure (~50%) [1]. Here we have reported a rare case of Papillary Mesothelioma arising from pleura.

CASE PRESENTATION

A 48-year Male presented with Shortness of Breath to Chest Medicine OPD. On radiological investigations (HRCT) there was pleural effusion along with Pleural Thickening. Pleural Fluid aspirate and sent to our department for cytological evaluation. After centrifugation smears were prepared and were stained both by Leishman- Giemsa and PAP stain. Simultaneously centrifuged deposits were subjected to cell block preparation. Cytosmear show presence of multiple papillary structures in a background of Reactive mesothelial cells and inflammatory cells (**FIG – 1**). Diagnosis was made as suspicious for malignancy. Sections from cell block showed presence of multiple papillary structures lined by Cuboidal epithelium having eosinophilic cytoplasm and Bland Nuclear Morphology (**FIG – 2**). Diagnosis was given as well differential papillary mesothelioma.

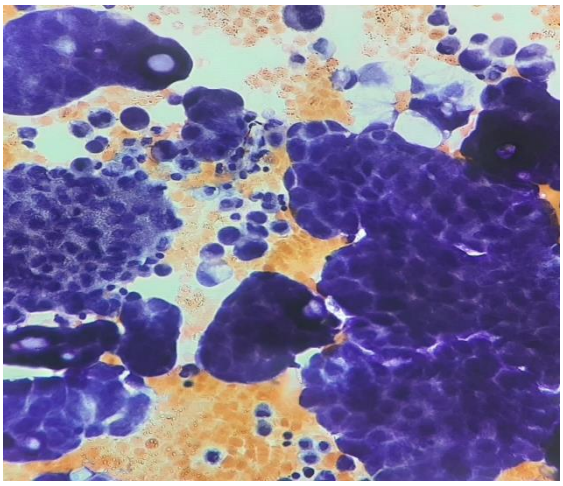

Figure 1: Showing papillary structures in cytosmears of pleural fluid (Leishman stain,400x)

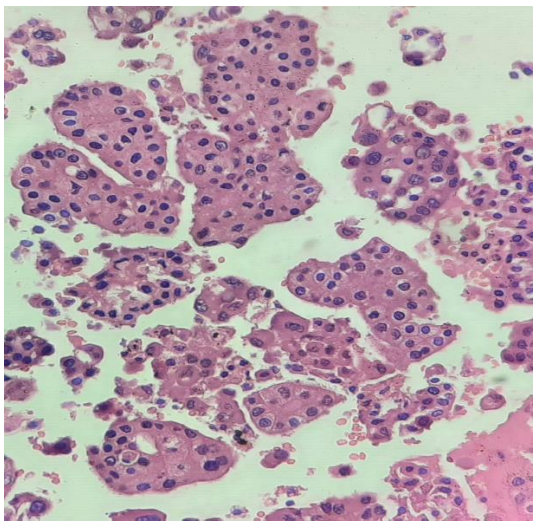

Figure 2: Showing features of well differentiated papillary mesothelioma (cell block)(H&E,100X)

DISCUSSION

WDPM is an uncommon variant of mesothelial neoplasm with uncertain malignant potential. Most commonly, involves peritoneum of young women [1]. Mesothelioma involves Pleura on tunica vaginalis in rare cases [2 - 4] Cases of WDPM arising from Pleura are more evenly distributed between men and women. Pleural cases also diagnosed at older age. Approximately 50 % case are unifocal [5]. WDPM have very classical histopathological features of papillae lined by a single layer of bland cuboidal cells [5 - 7]. Most cases have a benign clinical course with a low (< 5 %) recurrence rate in Classical cases.

CONCLUSION

WDPM in most of the cases diagnosed incidentally. Since WDPM arising from pleura is a rare entity, adequate knowledge about the cytological features is essential to prevent misdiagnosis of malignancy. We have reported this case due to its rarity. And also, due to its benign outcome, it is very important to differentiate it from malignant mimickers which have a much poorer prognosis.

Consent

Informed consent was taken from the patient participating in the study.

Conflicts Of Interest: NIL

Financial Support: NIL

Ethical Clearance: Not Applicable

Author Contribution: All authors are having equal contribution

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