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INTRODUCTION AND AIM:

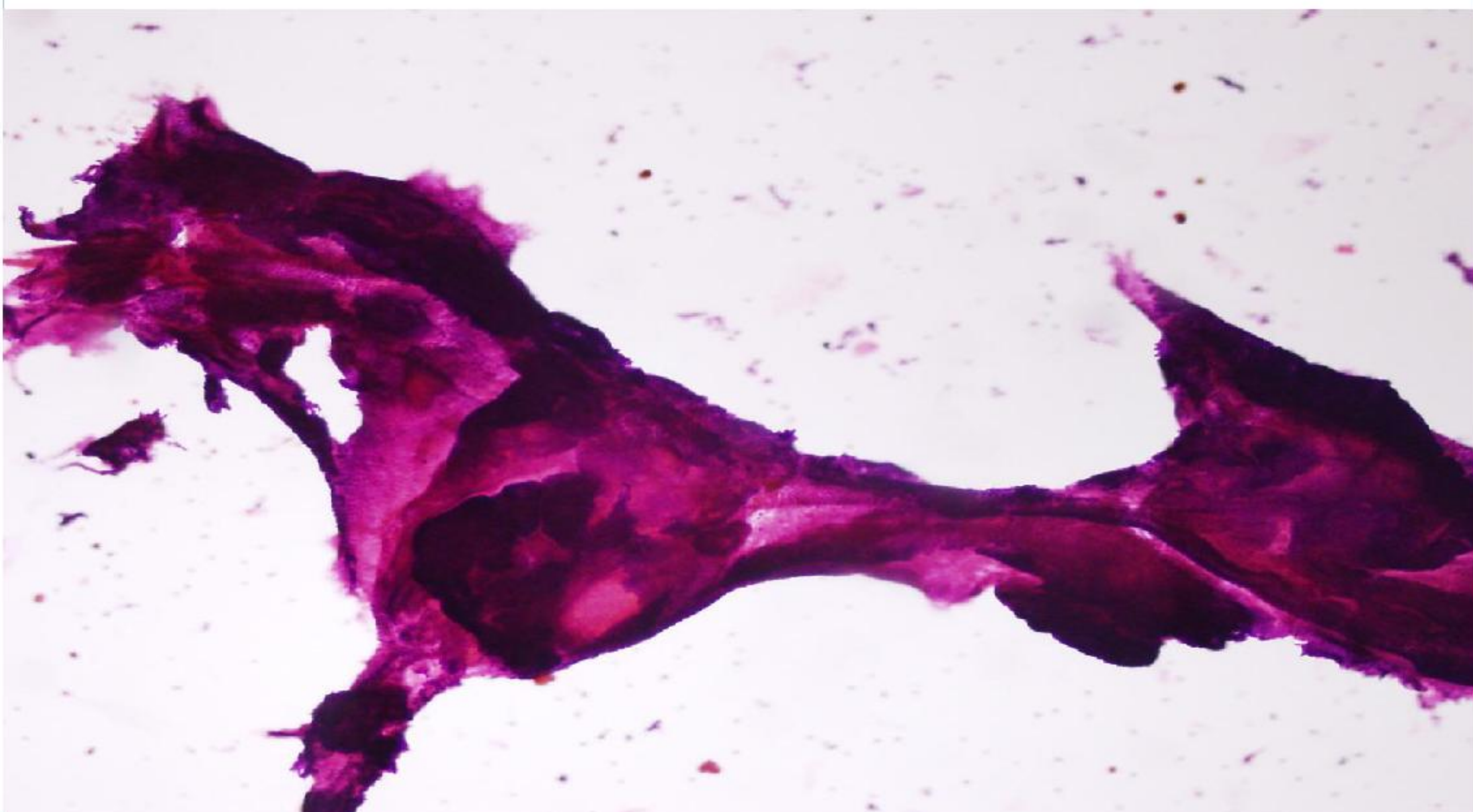
Bethesda system for thyroid cytopathology has been widely used recently. Approximately 3-7 % of thyroid needle aspiration biopsy (FNA) is considered as malign. Suspicious or malign nodules should likely to be resected. Aim of this study is to confirm the diagnosis of malign or suspicious for malignancy according to Bethesda classification in patients with nodular goitre after thyroidectomy.

MATERIALS AND METHODS:

Results of FNA in totally 402 patients with nodular goitre were achieved from our hospital records. All of the patients had undergone totally or subtotals thyroidectomy. We re-evaluated retrospectively biopsy results postoperatively. We compared their preoperative FNA results.

RESULTS:

We described totally 5 patients whom FNA were malignancy but results of postoperative biopsy were benign. We found false positive results as one 38 year-old patient with follicular adenoma, one 50 year-old patient with papillary thyroid cancer, and three patients (44.6 8.7 year) with suspicious for papillary thyroid cancer.



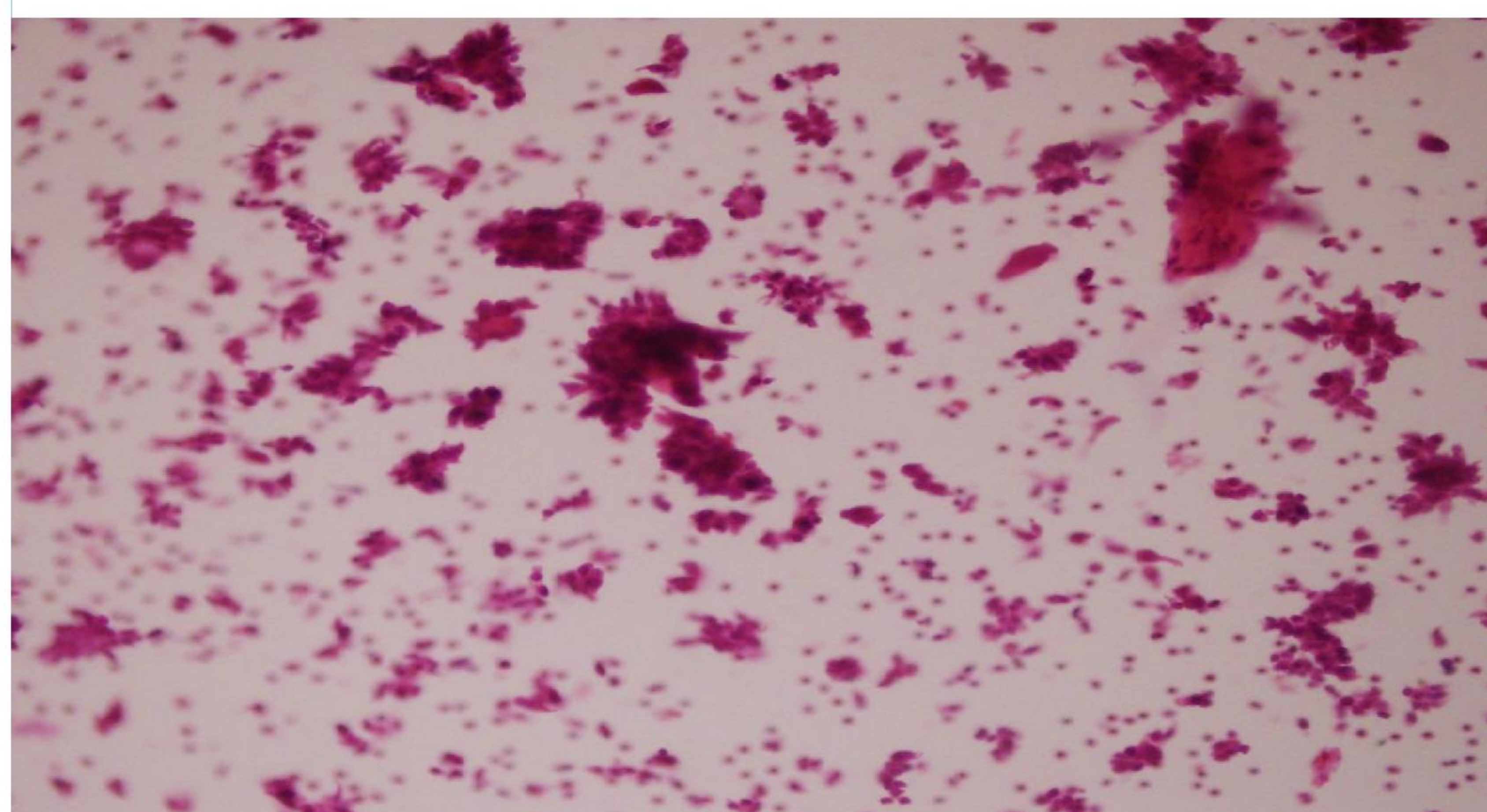
Adenomatous cytology of a hyperplastic nodules. Is interpreted as a large papillary structure has aroused the suspicion of papillary carcinoma.

CONCLUSIONS:

The malignity risk in classification of suspicious for malignancy and malignancy according to Bethesda reporting system is 60-75% and 97-99%, respectively after thyroidectomy. Our findings demonstrate that our false positive results are lower than reported Bethesda classification in medically literature. Hyperplastic adenomatoid nodule, follicular adenoma, well-differentiated follicular carcinoma and papillary carcinoma follicular variant have several characteristic features in common. Therefore, difficulty of these lesions in pathologically evaluation may lead false positive results.

False-positive cases are diagnosed malignant as cytologically and benign as histologically. In the literature the most common cause of false-positive lesions are expressed in adenomas. "Hyalinizing trabecular adenoma" a rare case of adenoma are sometimes diagnosed as papillary carcinoma. In the cytology studies dishormonogenetic goiter and Hashimoto thyroiditis can interfere with Hurthle Cell Cancer.

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A small group composed of hypercellular smears; increased cellularity nuclear detail is interpreted in favor of malignancy has led to a false positive.

