

AN UNUSUAL CASE IN ENDOCRINOLOGY PRACTICE: SUTURE GRANULOMA

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BACKGROUND

Suture granuloma, the rare complication of thyroidectomy, results from use of nonabsorbable suture materials. Despite its typical ultrasound images and benign course, it carries utmost importance in differential diagnosis of lymph nodes, recurrent nodules, and recurrence in case of thyroid cancers.

CASE REPORT

A fifty four years old female was admitted to the hospital in December 2014 due to growth of in the right and left anterior neck region mass for 6 months. She had a history of a bilateral thyroidectomy in July 2010 with a pathologic diagnosis of multinodular goiter and incidentally discovered micropapillary carcinoma (2 mm). She did not receive radioactive iodine therapy afterwards and has been on levothyroxine replacement therapy since then. physical examination revealed a 1.5x2 cm, well-defined, soft painless mass in the right thyroid bed, and masses with similar features that measure 1x1 cm in the isthmus and 1.5x1 cm in the left thyroid bed. The ultrasonography revealed hypoechoic lesions with irregular boundaries and containing micro and macrocalcifications and hyperechoic lines, that measure 20.1x13 mm in size on the right side, 16.5x7.5 mm on the left side, and 15.5x9 mm in the isthmus. The case was referred for a FNAB study. Pathologic evaluation of FNAB yielded neutrophilic polymorphonuclear leucocytes, lymphocytes, and histiocytes in a dirty granular background of sparse colloid and foreign-body multinucleated giant cells within intense inflammatory cell infiltrate forming cell debris in almost every region (Figure 2).

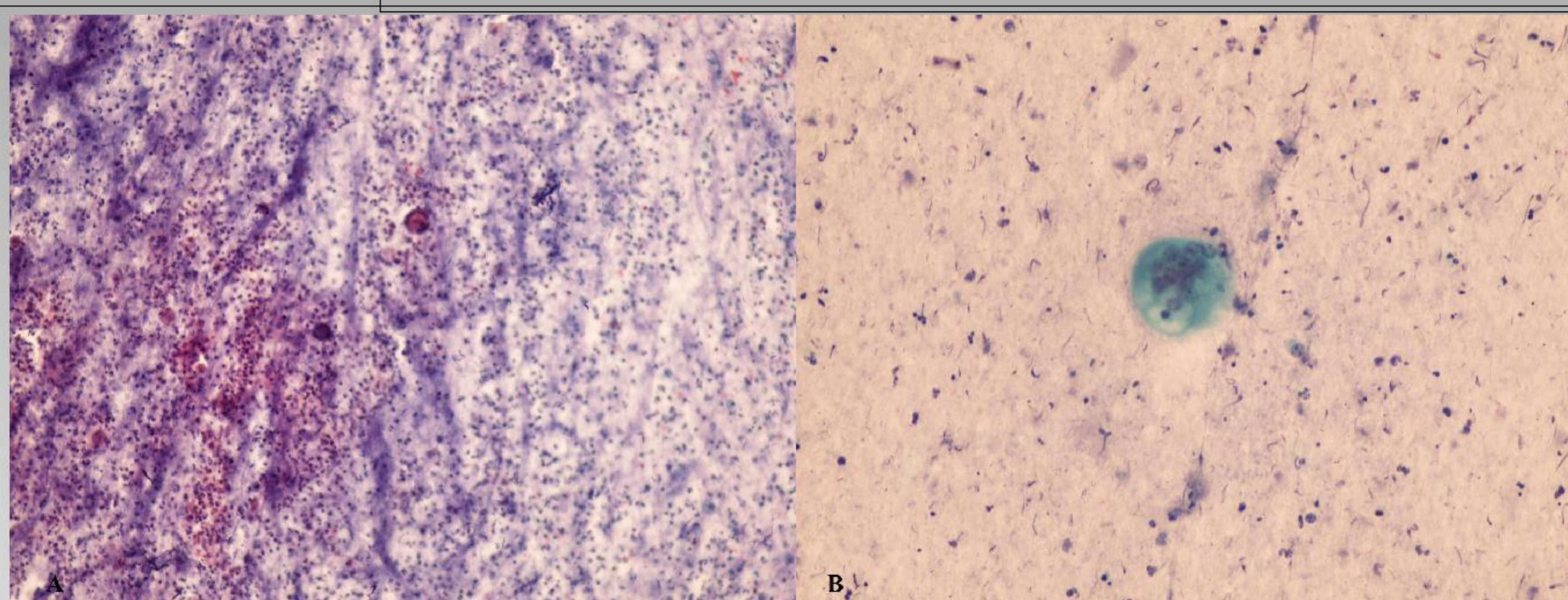


Figure 2:
A: Foreign-body multinucleated giant cells within cell debris and intense inflammatory cell infiltrate composed of neutrophilic polymorphonuclear leucocytes, lymphocytes, and histiocytes in background (PAP, X100)
B: Multinucleated giant cells in a dirty granular background of sparse colloid (PAP, X400).



Figure 1:
A: Transverse section on ultrasound. A 20.1x13 mm, well-defined, hypoechoic lesion containing hyperechoic lines in the right thyroid bed.
B: Transverse section on ultrasound. A 16.5x7.5 mm, well-defined, hypoechoic lesion containing hyperechoic lines, and microcalcification foci in the left thyroid bed.
C: Transverse section on ultrasound. A 15.5x9 mm, well-defined, hypoechoic lesion containing hyperechoic lines, and microcalcification foci in the isthmus thyroid bed.

CONCLUSIONS

Suture granuloma should be considered in differential diagnosis of local recurrence of the disease in thyroid bed along with lymphadenopathy and tumor recurrence in patients who undergone thyroidectomy and having ultrasound images suggesting recurrence. Diagnosis can be established by FNAB avoiding unnecessary imaging modalities such as MR or PET CT. Histiocytic reaction with foreign-body multinucleated giant cells on cytologic evaluation confirms diagnosis.

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Text

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