In summary, endometrial ossification in postmenopausal women is very rare; most women presenting with this condition are between 20 and 40 years of age. Therefore, clinicians should consider the possibility of endometrial ossification as a differential diagnosis of intrauterine foreign body on ultrasound, even in older patients. In addition, pathologists should be aware of this rare entity to avoid a misdiagnosis of malignant mixed müllerian tumour in the endometrial curettage specimen, which may result in unnecessary hysterectomy.


Lithium associated autoimmune thyroiditis

M Shimizu, M Hirokawa, T Manabe, K Shimozuma, H Sonoo, T Harada

Abstract
A case of autoimmune thyroiditis after long term treatment with lithium is described in a 29 year old Japanese woman with manic depression. Positive serum antithyroglobulin and antimicrosomal autoantibodies, diffuse goitre, and microscopic chronic thyroiditis, as well as the clinical history of long term lithium treatment were suggestive of lithium associated autoimmune thyroiditis. Microscopically, there was a mild degree of interstitial fibrosis and a moderate degree of lymphocytic infiltration. Some areas showed a moderate degree of stromal fibrosis and atrophic thyroid follicles. Lymphoid follicles with germinal centres, disrupted thyroid follicles with lymphocytic infiltration, and Hürthle cells were also observed. The differential diagnosis in patients presenting with these histological features includes painless (silent) thyroiditis, autoimmune thyroiditis and lithium associated autoimmune thyroiditis. A detailed clinical history is essential if the correct diagnosis is to be reached. (J Clin Pathol 1997;50:172-174)

Keywords: thyroid; lithium; autoimmune thyroiditis.

Lithium has been used in the treatment of manic and hypomanic depressive disorders for many years. Long term treatment with lithium is associated with hypothyroidism, euthyroid goitre, and hyperthyroidism. The aetiology of the first two conditions can be explained by the effect of lithium on the thyroid; however, that of hyperthyroidism has not been explained adequately. Other cases of lithium related thyroid disease have been reported but...
the histological findings have not. We describe a
case highlighting the histological findings of
lithium associated autoimmune thyroiditis.

Case report
In August 1993, a 29 year old Japanese woman
was admitted hospital for resection of a diffuse
goitre because she wanted to have a baby. The
patient's illness dated back to July 1988. She
had been treated for manic depression with
lithium carbonate (600 mg/day) for 27 months.
Goitre was not noted and serum thyroid autoantibody was not measured at her initial
presentation. In October 1990, the patient
complained of palpitations, irritation and
weight loss, and was diagnosed with Graves' disease. Immediately after this diagnosis, she
was treated with methimazole (15 mg/day)
until August 1993. The patient also continued
to be treated with lithium. In April 1992, the
results of her thyroid function tests were as
follows: thyroxine, 233 nmol/l (normal range
58–155 nmol/l); triiodo-thyronine, 3.6 nmol/l
(1.2–3.1 nmol/l); thyroid stimulating hormone
(TSH), <0.05 µU/ml (0.03–5.00 µU/ml); and TSH binding inhibitor immunoglobulin
(TBII), 22.9% (<15%), which were suggestive
of a diagnosis of Graves' disease. However,
on admission in 1993, the patient had
become euthyroid, and diffuse goitre (right
lobe 6.5 × 2.3 × 1.7 cm; left lobe 6.5 × 2.0 × 1.5 cm) was observed. Both serum an-
tithyroglobulin and antimicrosomal antibodies
were positive at that time. The patient underwent subtotal thyroidectomy for
the diffuse goitre.

Pathology
Grossly, the resected thyroid was covered with
scattered white spots, but no mass was noted.
Microscopically, lobulation of the gland was
observed under low power. There was a mild
degree of interstitial fibrosis and a moderate
degree of lymphocytic infiltration. The thyroid
follicles varied in size. Some areas showed a
moderate degree of stromal fibrosis and
atrophic thyroid follicles. Lymphoid follicles
with germinal centres, disrupted thyroid folli-
cles with lymphocytic infiltration, and Hürthle
cells were also observed in some areas (figs 1
and 2). In other areas, papillary infoldings pro-
jecting into the thyroid follicles and scalloping
of the colloid were present.

Discussion
The development of hypothyroidism or goitre
is a well known complication of long term
lithium treatment. There have, however,
only been sporadic cases of hyperthyroidism
among patients treated with lithium. Other
lithium related or associated thyroid diseases
have rarely been described in the literature, and
only three cases of lithium associated thyroiditis and three cases of lithium associated
autoimmune thyroiditis have been reported. In
the cases of lithium associated thyroiditis,
thyroid antibody levels were not measured.
Histologically, in the two cases reported by
LiVolsi, lymphocytic infiltration, focal follicu-
lar atrophy and mild stromal fibrosis were
observed. It was also pointed out that the
histopathological appearance was consistent
with that found in autoimmune thyroiditis.
In the case reported by Kontozoglou and
Mambo, prominent fibroblastic activity and
numerous lymphoid follicles lacking typical
Hürthle cells were observed. Our patient
showed lymphocytic infiltration with lymphoid
follicles and interstitial fibrosis with focal
follicular atrophy, as well as disrupted thyroid
follicles and Hürthle cells. In addition, our
patient presented with positive serum antithy-
roid antibodies and diffuse goitre, and a clinical
history of long term lithium treatment, all of
which are suggestive of lithium associated
autoimmune thyroiditis. Lithium may also
notably increase the titre of thyroid microsomal
antibodies and convert latent subclinical au-
toimmune disease into clinically overt illness.
In practice, however, it is difficult to arrive at
the correct diagnosis without knowledge of the
patient's clinical history. In our patient, we
considered that the lymphocytic infiltration
and lymphoid follicles with germinal centres
were too noticeable to be those typically found
in Graves' disease, and chronic thyroiditis was
clearly observed histologically. Furthermore,
Atypical manifestations in a patient with systemic lupus erythematosus

K Y Lam, F Cheung, L Y C Yam, C H Lee, K H Fung

Abstract
Systemic lupus erythematosus (SLE) is a chronic systemic inflammatory disease associated with the production of various autoantibodies and involvement of multiple organs. Necropsy findings in a 65 year old woman with SLE who had multiple aortic aneurysms and dissections, as well as other unusual manifestations, are described. The case illustrates the occurrence of and the difficulties encountered in the diagnosis of several diseases, namely aortic aneurysm, aortic dissection, acute pancreatitis, and *Penicillium marneffei* infection.

Keywords: systemic lupus erythematosus; aneurysm; dissection.

Systemic lupus erythematosus (SLE) is a chronic systemic inflammatory disease associated with the production of various autoantibodies and involvement of multiple organs. We report the necropsy findings in a patient with between painless thyroiditis and lithium-associated autoimmune thyroiditis. Treatment with methimazole may have partly affected the change from a hyperthyroid to a euthyroid state in this patient.

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