Management of Hashimotos thyroiditis at a tertiary care hospital

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Abstract
Hashimotos Thyroiditis is a very common clinical problem affecting up to 2% of female population this disorder has a varied presentation across the clinical spectrum its study seeks to analyze the clinical profile. Evaluate is also notorious for being associated with a large number of other disorders there is also controversy regarding indications of surgical management. This study seeks to analyze the clinical profile, evaluate the incidence of associated disorders and to study the management including indications of surgical management. Patients with diagnosis of Hashimoto’s thyroiditis were included in this study. Detailed clinical history and physical examination of the patients was done. Suspected patients were subjected to thyroid function test, FNAC, USG neck. The diagnosis was confirmed with serology. After confirmation of diagnosis, patients were treated with levothyroxine at the standard dose of 1.6-1.8 mcg/kg lean body weight per day. A subset of patients was treated surgically. Treatment of hashimotos in most cases is conservative with thyroxine supplementation and regular follow up. A significant subset requires surgical intervention. Surgery in hashimotos thyroiditis according to latest recommendations is total thyroidectomy.

Keywords: Management, Hashimotos thyroiditis, FNAC

Introduction
The thyroid gland is an endocrine gland situated in the lower part of front and the sides of the neck. Its main function is regulation of the basal metabolic rate, stimulates somatic and psychic growth and plays important role in calcium metabolism. The term thyroid is derived from Greek, which means shield (Thyro-shield, eidos-form) [1].

Thyroiditis comprises of a diverse group of disorders that are among the most common endocrine abnormalities encountered in clinical practice. These disorders range from the extremely rare invasive fibrous thyroiditis. Hashimotos thyroiditis being the most common disorder in this group warrants a thorough understanding and evaluation [2].

Hashimotos Thyroiditis is a very common clinical problem affecting up to 2% of female population this disorder has a varied presentation across the clinical spectrum its study seeks to analyze the clinical profile. Evaluate is also notorious for being associated with a large number of other disorders there is also controversy regarding indications of surgical management. This study seeks to analyze the clinical profile, evaluate the incidence of associated disorders and to study the management including indications of surgical management [3].

Hashimotos thyroiditis is notorious for its varied presentation. It is also of importance to keep in mind its high association with other disorders both thyroiditis and systemic its high association with malignancy has led many to believe that it may actually be a pre malignant disorder [4].

The treatment of hashimotos involves thyroid replacement therapy in the form of I thyroxine. It is important however to keep in mind the clinical scenarios that require surgical intervention and to understand the extent of intervention require. It is therefore of prime importance to thoroughly understand this very common disorder and be familiar with all its presentations as well the associations and various modes of treatment.

Methodology
Patients with diagnosis of Hashimoto’s thyroiditis were included in this study. Detailed clinical history and physical examination of the patients was done. Suspected patients were subjected to thyroid function test, FNAC, USG neck. The diagnosis was confirmed with serology.
After confirmation of diagnosis, patients were treated with levothyroxine at the standard dose of 1.6-1.8 mcg/kg lean body weight per day. A subset of patients was treated surgically. The criterion for surgical intervention was
- Presence of a nodule suspicious of malignancy
- Large goiter causing compressive symptoms
- Painful hashimoto
- Cosmetic

All candidates accepted for operative treatment underwent total thyroidectomy as per internationally accepted guidelines. The specimens of operated cases were routinely subjected to HPE examination to detect the associated pathologies, particularly malignancies. All patients in post operative phase were put on levothyroxine.

Results

Treatment of hashimotos in most cases is conservative with thyroxine supplementation and regular follow up. A significant subset requires surgical intervention. Surgery in hashimotos thyroiditis according to latest recommendations is total thyroidectomy.

Table 1: Treatment

<table>
<thead>
<tr>
<th>Treatment</th>
<th>No of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conservative</td>
<td>82</td>
</tr>
<tr>
<td>Operative</td>
<td>18</td>
</tr>
</tbody>
</table>

Indications of surgery

In our study the indications of surgery were
1. Large goiter having suspicion of malignancy - 09 patients
2. Established malignancy - 05 patients
3. Pressure symptoms - 03 patients
4. Painful hashimotos - 01 patient

Associated disorders in hashimotos can be classified into two main groups
A. Associated disorders of the thyroid gland
B. Associated systemic disorders

Among associated thyroid disorders, hashimoto with concomitant mng accounted for the largest chunk (50 percent of all associations, 27 percent of all operated specimens). The other associations were papillary carcinoma, mng with papillary carcinoma and hurthle cell carcinoma.

Table 2: Associated systemic disorders

<table>
<thead>
<tr>
<th>Associated disorder</th>
<th>No. of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rheumatoid arthritis</td>
<td>06</td>
</tr>
<tr>
<td>Systemic lupus erythematosus</td>
<td>02</td>
</tr>
<tr>
<td>Celine disease</td>
<td>02</td>
</tr>
<tr>
<td>Vitiligo</td>
<td>02</td>
</tr>
<tr>
<td>Autoimmune hepatitis</td>
<td>01</td>
</tr>
<tr>
<td>Polymyositis</td>
<td>01</td>
</tr>
<tr>
<td>Sjogren's syndrome</td>
<td>01</td>
</tr>
</tbody>
</table>

Discussion

All of the patients in our series were treated with oral replacement of 1 thyroxine therapy-18 patients did not respond to 1 thyroxine replacement and required thyroidectomy. The decision to proceed to thyroidectomy was prompted mainly because of a clinical suspicion of malignancy or established malignancy on FNAC. Thus 14 patients of the 18 operated were subjected to thyroidecetomy because of established malignancy or a clinical suspicion in a large nodule. 3 patients were operated because of oppressive goiter. In larger series reported by sclafani et al. and Thomas jr et al, the most common indication of surgery has been a suspicion of or proven malignancy. Compressive symptoms of a large goiter is a less common indication of surgery. Painful hashimotos is rarely reported cause. In the series reported by siriwewea et al. 40.69% patients with hashimotos who underwent thyroidectomy had associated pathologies. We found as much as 54% of these specimens to have an associated pathology. 50 percent of these associated pathologies are benign as reported by us while in the larger series by siriwewe and repplinger, they have been reported as 54% and 42% respectively.

Papillary carcinoma has been reported to be the most common malignancy. It accounts for 72 percent of all malignancies associated with hashimotos (siriweera). In present study 60 percent of all malignancies reported were papillary carcinoma. The second most common malignancy is follicular carcinoma though the exact incidence varies (17% siriweera, 35% repplinger). Our study pegs the incidence to be 40 percent of all associated malignancies.

There is no case of lymphoma reported by us.

Conclusion

Most patients can be managed conservatively with 1 thyroxine. A subset of patients require surgical intervention. A diagnosed malignancy or a clinical suspicion of malignancy is the most common indication of surgical exploration, presence of an obstructing goiter and painful hashimotos are other indications.

References