INJECTION TRIAMCINOLONE ACETONIDE EFFICACY GIVEN SUPRATARSAL FOR SEVERE VERNAL KERATOCONJUNCTIVITIS TREATMENT

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Abstract:

Objective: To evaluate the triamcinolone efficacy given supratarsal injection for the treatment of severe spring keratoconjunctivitis (VKC) patients refractory to all conventional treatments.

Study Design: A Retrospective Study.

Place and Duration: In the Ophthalmology Department, Unit I of Jinnah Hospital, Lahore for one-year duration from March 2016 to March 2017.

Methods: 18 patients with vernal keratoconjunctivitis (VKC) resistance were selected for the study. Patients who showed signs of the disease were evaluated clinically. Supratarsal triamcinolone acetonide injection 0.5 ml (20 mg) was applied. These events were monitored and the intraocular pressure increased within a period of two years in order to evaluate the symptoms and alleviate symptoms and symptoms of the disease.

Findings: The disease responds to the symptomatic treatment dramatically. Corticosteroid administration in all patients was 50% with papilla cobblestone appearance within three weeks. 22% of patients had ulcer shield reduction and 33% of patients had limbal involvement within 1-3 weeks. No side effects or complications were seen.

Conclusion: The dramatic symptomatic relief and clinical improvement of the disease, and increased IOP may suggest that corticosteroid injection may be important for VKC treatment refractory to other approaches.

Keywords: Triamcinolone, vernal Keratoconjunctivitis, Supratarsal.

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INTRODUCTION:
VKC typically affects young people with 12 years of average age, with a preference for younger children. There are a variety of therapeutic methods available for your treatment. Mild cases can usually be treated with tear substitutes, cold packs, topical antihistamines or topical vasoconstrictors. Severe VKC treatment is still an issue for the physician and patient. Advanced large cobblestone papilla limbal severe disturbance or shielding " ulcers VKC patients are a rare but serious complication, usually symptomatic and often difficult to overcome because of the difficulties present. In advanced VKC newly discovered therapies are used because of the general frustration with the treatment of refractory patients. To alleviate some of the symptoms suprofen and aspirin which are oral prostaglandin mediators are used. Recently, topical levocabastine hydrochloride, lodoxamide and ketotifen fumarate have been shown to provide some relief in mild to moderate affected patients. However, when the disease with severe refractory disease is administered, the efficacy is equally disappointing. There are very few publications on this subject. We have done a study to use the supratarsal injection technique of corticosteroids in our clinic, which is a safe and effective trial in VKC patient’s treatment who are difficult to treat.

MATERIALS AND METHODS:
This Retrospective study was held in the Ophthalmology Department, Unit I of Jinnah Hospital, Lahore for one-year duration from March 2016 to March 2017.18 patients with VKC symptoms and symptoms were included in the study who did not respond to maximum medical treatment between 5 and 25 years of age. All patients who had systemic disease, eye trauma, cataracts, high eye pressure, eye surgery, less than 4 months and less than 5 visits and no more than 25 years of age were not included in the study. All patients received topical lodoxamide 0.1%, sodium cromoglycate 4% and 0.125% prednisolone acetate. With oral treatment or topical cyclosporine no patients were treated. Despite this cure, the patients' daily routine intervention included foreign body sensation, severe itching, photophobia and mucus discharge were evaluated. Clinical indications include insufficient control of giant papilla persistence (Fig. 1), ulcer shielding, permanent conjunctival limbal thickening and swelling.

Fig. 1:
These patients were given corticosteroids in supratarsal region. Written permission was obtained from patients. Injection is given in general or local anesthesia. With a cotton tip applicator, 27-gauge needle epinephrine and 2.5 ml of 2% lidocaine were used for injection. the marginal passage is placed over the needle, conjunctive, 1 mm upper-side tarsal, as shown in Figure 2, to prevent blood vessels from causing an increase in the potential area between Müller’s muscle and conjunctiva. (27-gauge needle injected with triamcinolone acetonide0.5 ml (20 mg) was placed into the supratarsal space between the Müller's muscle and conjunctiva slowly after recognizing it for anesthesia.

Fig. 2:
Eye pads were applied for 24 hours. After the injection, the patients received four times daily sodium cromoglycate 4%. If ulcers are present, topical moxifloxacin prophylactic ally is given. The patients monitored the relief of their symptoms and were available for the resolution of clinical findings. the size of the papilla resolution from cobblestones,
or a 50% reduction in the number of buds. The solution of the limbal involvement was completed with the limbalin rising from the central edema, Trantas spots and limbal papilla. The resolution of the shield ulcer was defined as the complete epithelial defect healing. Patients were also evaluated for possible complications such as, skin depigmentation, blepharoptosis, motility changes, infections, increased intraocular pressure and conjunctival scarring.

RESULTS:
In the study total 18 patients were selected. In Table – I, Age groups are given. Gender and presentation of VCC are shown in Table – II & III.

Table – I: Age Group Distribution

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Patient's Number</th>
<th>Patient's Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 to 10 Years</td>
<td>8</td>
<td>44.44</td>
</tr>
<tr>
<td>10 to 25 Years</td>
<td>10</td>
<td>55.55</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table – II: Gender Distribution

<table>
<thead>
<tr>
<th>Sex</th>
<th>Patient's Number</th>
<th>Patient's Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>13</td>
<td>72.22</td>
</tr>
<tr>
<td>Female</td>
<td>5</td>
<td>27.77</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>18</strong></td>
<td><strong>100</strong></td>
</tr>
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With triamcinolone acetonide 0.5 ml (20 mg) injection all patients were treated and followed at least four at 4 months to 2 years after injection. All patients experience a dramatic and rapid response to attenuation symptoms, especially after 1-5 days. Clinical response and Symptoms were dramatic. For all patients there was a 50% reduction in papillary papilla within 15 days. On the fourteenth day of 18 patients, after the supratarsal injection, the cobblestone papillae had completely disappeared.
Limbal VCC, six patients with thickening and edema, Trantas dots and limbal papilla improved in thirty days. With shielding ulcers 4 patients were noted with epithelial defects, complete remission after three weeks of injection. After supra-tarsal injection treatment, all patients were treated with conventional therapy, such as 0.1% lodoxamide and 4% topical sodium cromoglycate. Two patients were needed to give the injection again after 7 weeks and become within 15 days they become asymptomatic. Potential complications such as blepharoptosis, infections, skin depigmentation, conjunctival scarring, motility changes and increased IOP have not been noted.

DISCUSSION:
VKC is a rare condition in our country. However, in response to conventional treatments, more resistant conditions require mild to moderate severity and VKC requires effective therapeutic modalities. In the past, severe refracture was treated with an aggressive intervention involving VKC pavers and surgical excision with papilla on the upper part of the papillary tarsal. These radical treatment methods are largely ineffective and result in extensive wound healing. Current treatment options, including tear substitution, topical antihistamines, topical NSAIDs, mast cell stabilizers, and topical corticosteroids, are minimally effective in advanced disease. Recently, oral mediators have been used and new mast cell stabilizers, prostaglandins. In general, this tool has created frustration when it is applied to activities that are resistant. Agents such as topical cyclosporine have also been tested as adjuvant and monotherapy in patients. Temporary symptomatic relief is obtained in these studies, but the papillae have less effect on stone or ulcer. In addition, symptoms usually recur after cyclosporine has been stopped. VKC dissolves the complex as it usually prevents excessive treatment, conservative and iatrogenic side effects. The new therapeutic intervention should be designed with these details. The supra-tarsal injection well was well tolerated by a young person. One patient was injected and symptomatic relief was available when the topical treatment was very consistent with the regimen. Of course, the symptoms of the patient contribute to the success of post-injection therapy and the increased compliance is reduced. The results of our work are very encouraging. Symptomatic dramatic relief and clinical improvement of the disease and IOP elevation have shown that supratarsal injection of corticosteroids in refractory VKC treatment may have great therapeutic value. When we think that the work is a small scale and a single center, we recommend that you work on a large scale and multi-center scale to achieve a definite result.

REFERENCES:
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