

## CASE REPORT

# RECURRENT EPISCLERITIS IN CHILDREN-LESS THAN 5 YEARS OF AGE

**Syed Ashfaq Ali Shah, Hassan Sajid Kazmi, Abdul Aziz Awan, Jaffar Khan**

Department of Ophthalmology, Ayub Medical College and teaching Hospital, Abbottabad

**Background:** Episcleritis, though common in adults, is a rare disease in children. Episcleritis is associated with systemic diseases in a third of cases in adults. Here we describe systemic diseases associated with recurrent episcleritis in children less than five years of age. **Method:** This Retrospective Observational case series study was conducted at the Department of Ophthalmology of Ayub Teaching Hospital, Abbottabad, from March 1995 till February, 2006. Six children diagnosed clinically with recurrent episcleritis were included in this study. Complete ophthalmologic as well as systemic evaluation was done in each case. **Results:** This study was conducted on 6 children with a diagnosis of recurrent episcleritis. There were four boys and two girls, with an age range of 35-52 months. Right eye was involved in three cases, left eye in two cases while one case had a bilateral disease. Recurrence occurred in the same eye in all cases, with one bilateral involvement. Four children (66%) had a history of upper respiratory tract infection in the recent past. No other systemic abnormality was detected in any case. Two cases had a history of contact with a pet animal. **Conclusion:** Recurrent episcleritis in young children is a benign condition. Upper respiratory tract infection is the most common systemic association. Pet animals may be a contributory factor.

**Keywords:** Recurrent Episcleritis, Children, Age, Systemic Disease.

## INTRODUCTION

Episclera is a delicate vascular structure that covers the Sclera<sup>1</sup>. Tenon's capsule (Fasia Bulbi) and the conjunctiva covers the episclera in turn<sup>1</sup>. The delicate blood vessels of the episcleral tissue are readily visible through the conjunctiva<sup>2</sup>

Episcleritis is an inflammation of the episcleral and superficial layers of Tenon's capsule. It is a common clinical entity, affecting mostly young adults<sup>3</sup>. It is a clinical diagnosis. It is relatively uncommon in children<sup>4</sup>.

It is usually a benign and self limiting condition. However, occasionally it may be the harbinger of a more sinister underlying disease<sup>5-6-7</sup>. The prevalence of episcleritis in children is essentially unknown. The literature on this topic is extremely scanty; with most previous reports being based on selected older children<sup>8</sup>.

Here we report 6 eyes of 5 patients with recurrence of episcleritis in children less than 5 years of age. To the best of our knowledge, this is the first such report.

## MATERIAL & METHOD

This is a retrospective observational case series report. It was conducted at Department of Ophthalmology of Ayub Teaching Hospital Abbottabad, between March 1995 and February 2006. Eight children who presented with recurrent episcleritis were included in this study and who were

previously been diagnosed with episcleritis. Episcleritis was diagnosed clinically.

Each child underwent complete medical & ophthalmologic examination. A detailed history was taken, with special reference to any illness related to gut, joints, respiratory system or any other systemic illness. A complete ophthalmologic examination including a slit lamp examination was carried out on each patient. Each patient underwent the following investigations: full blood count with ESR, urinalysis, stool R/E, X-Ray chest, X-Ray sacroiliac joint/knee joint. Where necessary, the advice of a pediatrician was sought. Children with ambiguous history or a history of any discharge or any other diagnosis of acute red eye were excluded from the study.

## RESULTS

We studied 8 children with recurrent episcleritis. However, two children with mention of some "discharge" in their initial diagnosis were excluded from this study. In all 6 children were included in this study.

There were four boys and two girls. One boy had a bilateral disease. The age range was between 35-52 months. The clinical characteristics of the children are given in Table-1.

All children were diagnosed with simple episcleritis. Recurrence occurred in the same eye which had suffered the initial episode of inflammation. One eye had a bilateral disease. No predilection for right or left eye was observed.

Out of six children, 4 (66 %) had a history suggestive of upper respiratory tract infection in the past six weeks. In two children, contact with home pets was elicited. The systemic evaluation, however, was unremarkable in all the cases.

**Table-1: Clinical characteristics of six recurrent episcleritis patients (N-6)**

Patient No	Age Yr	Sex	Eye	Systemic disease	Contact with Pets
1	2.9	Male	OD	URTI	No
2	2.9	Female	OD	URTI	No
3	3.1	Female	OS	URTI	No
4	3.8	Male	OU	None	Yes
5	4.3	Male	OS	URTI	Yest
6	4.1	Male	OD	None	No

## DISCUSSION

This is, to the best of our knowledge, the first study to investigate children less than 5 years of age for any systemic illness with recurrent episcleritis. This study has again confirmed that episcleritis, even if it is recurrent, is a benign illness. The most common association was an upper respiratory tract infection in the recent past.

Episcleritis is an uncommon clinical entity in children<sup>4</sup>. In their cohort of 159 patients with episcleritis, Watson and Hayreh observed no child to be among their 159 patients<sup>6</sup>. Sainz et al reported 94 cases of episcleritis with only two older children<sup>8</sup>. Russel et al reported episcleritis in 12 children. In their study there were three children less than 5 years of age<sup>4</sup>. Out of these 12 children, six (50%) had an underlying rheumatologic disease.

We observed upper respiratory tract infection to be the most common systemic association with recurrent episcleritis. This confirms the report of Russel et al who also observed upper respiratory tract infection to be present in their children younger than 5 years of age<sup>4</sup>. We did not observe any rheumatologic disease in any of our 6 patients.

Russel et al reported rheumatologic disease in ((50%) of their patients<sup>4</sup>. However there was no rheumatologic disease in any of their patient younger than 5 years of age<sup>4</sup>. This may be attributed to the fact that rheumatologic disease present usually later in older children.

We observed two cases with a history of contact with a pet and in one of these patients, one had a bilateral disease. We cannot say whether this can be a contributing factor because of the small number of patients.

We did not observe any predilection for gender. However, due to very small number of patients this may be inconclusive. We think this disease may not be that rare but it may be under reported due to its self-limitedness or the general physician seems to be taking care of such acute red eye.

We conclude that episcleritis, even if recurrent, is a benign and self limiting disease in young children. It is most commonly associated with upper respiratory tract infection. Contact with a pet may be a contributory factor in some of these patients.

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**Address for correspondence : Dr. Sajid Hassan Kazmi, Dr. Syed Ashfaq Ali Shah, Associate Professor, Department of Ophthalmology Unit "A" Ayub Medical College & Teaching Hospital, Abbottabad. Tel: +92-0992-383889**

Email: ashfaq fauzia @yahoo.com