

# Measles Kerato - Conjunctivitis

A J BADINI R A BALOCH A H KHOKHAR

Department of Ophthalmology, Bolan Medical College, Helper's Eye Hospital, Quetta  
Correspondence to Dr. Riaz Ahmed Baloch, Assistant Professor

**Purpose:** To evaluate the 2 years results i.e., 2004-2005 for a group of patients with measles kerato - conjunctivitis who were treated with combined oral and topical vitamin A with antiviral acyclovir and antibiotic fusitek in shot gun therapeutic mode **Methods:** Patients with measles kerato-conjunctivitis rang in age from 12 years to 215 years treated with topical vitamina A and Acyclovir, fusitek drops some responded dramatically. **Results:** Of the 11 patients, 7 male and 4 females age ranges 2 to 12 years, 5 completely recovered, 4 patients with residual scarring with leucomatous cornea bilaterally, one with bilateral symblepheron and one with ruptured globe and phthisis bulbi. **Conclusion:** The timely interference and aggressive therapy in both eyes and sight saving.

**Key words:** Measles kerato, conjunctivitis

A communicable viral disease worldwide endemicity and three phase disease i.e., I) incubation phase - a symptomatic phase ii) prodromal phase - mild symptoms, with pathognomonic (koplic spot) iii) exanthemic phase - with high fever, pre-auricular and occipital lymphadenopathy.

There are myriads of complications, but most important can be remembered by pneumonic - opened.

- i. Otitis media
- ii. Pneumonia (giant cell type).
- iii. ]Encephalitis
- iv. NOMA (gangrene)
- v. Eye - complications
- vi. Dawson's subacute sclerosing encephalitis

In the prodromal phase the peculiar conjunctivitis is pathognomonic and aids in nasoragnosis of measles. The characteristic feature i.e., transverse line of conjunctival inflammation sharply demarcated along the eye lid margin and koplic spots in the caruncle.

## Diagnosis

- i. Straight forward clinically unless modified by vaccination or lotrogenically.
- ii. WARTHIN - Finkeldy giant cells, in nasal and conjunctival pappnicalou smears
- iii. Blood picture - leucopenia with relative lymphocytosis
- iv. Rising antibody titre in acute and convalcent sera
- v. Cytopathic effect in tissue culture and virus isolation

## Differential diagnosis

Exanthemic disease i.e., exanthema sub-item (rosella infantum).

## Rubella

Infectious mononuclosa  
Kawashiokor disease  
Meningococcus  
Septicemia

Scarlet fever

Ricketesail disease

SSS Syndrome (staphylococcal scalded skin syndrome)

Lyll's syndrome (Ten syndrome)

Steven Johnson Syndrome

B.M.M.P. (O.C.P.(E.C.S)

Burns (alkaline, acids, streams, boiling liquids)

## Material methods

Eleven patients with measles came in our observation, the common feature among all them was severe photophobia and inability to open the eyes in ordinary room light. The conjunctivitis was adherent and adhesive and greesy type with mucous discharge the keratitis ranged from punctate keratopathy and huge desequamation of corneal epithelium with decemetoccele formation and rupture globe.

Table 1

Pt. No.	Age/Gender	Medical with ocular history	Days of ocular symptoms
1	Male, 2 yrs	Malnourished Unvaccinated	7 days
2	Male 3 yrs	None Unvaccinated	3 days
3	Male 5 yrs	None Unvaccinated	3 days
4	Male 7 yrs	None Unvaccinated	4 days
5	Male, 4 yrs	None Unvaccinated	5 days
6	Male, 5 yrs	None Unvaccinated	6 days
7	Male, 12 yrs	None Unvaccinated	3 days
8	Female, 3 yrs	None Unvaccinated	2 days
9	Female, 3 yrs	None Unvaccinated	5 days
10	Female, 4 yrs	None Unvaccinated	2 days
11	Female, 5 yrs	None Unvaccinated	7 days

Table 2

Diagnosis	Management Topical Vit-A	Result	Follow up
Measles	Oral seven seas	Disappointing	Two weeks
K.C.S.	Fusitek eye drops	Bilateral phtthisis bulbi	Two weeks
M.K.C.S.	Fusitek eye drops	Excellent	Two weeks
M.K.C.S.	Fusitek eye drops	Excellent	Two weeks
M.K.C.S.	Fusitek eye drops	Excellent	Two weeks
M.K.C.S.	Fusitek eye drops	Sectorial corneal leucoma	Two weeks
M.K.C.S.	Fusitek eye drops	Bilateral corneal opacification with central corneal sparing	Two weeks
M.K.C.S.	Fusitek eye drops	Excellent	Two weeks
M.K.C.S.	Fusitek eye drops	Excellent	Two weeks
M.K.C.S.	Fusitek eye drops	Bilateral inf. Segment opacification	Two weeks
M.K.C.S.	Fusitek eye drops	Good	Two weeks
M.K.C.S.	Fusitek eye drops	symblepheron ankyloblepheron	Two weeks

### Discussion

The measles virus is communicable and epidemic and its end its endemecity is world wide. The ocular complication of kerato-conjunctivitis is very devastating and drastic, especially in unvaccinated cases.

Early recognition management is mandatory, if the progression is not halted that the case becomes very refractory to the treatment and prognosis grave leading to the pseudocornea formation, staphyloma formation,

phtthisis bulbi, symblepheron and ankyloblepheron formation, dislapidated and disfigured eye.

The cornea with conjunctiva are mainly ectodermal origin as the skin and may be regarded as modified skin, thus do not forget the phylogenetic heritage and coshare with the skin the dermatotrophic insults either virus or of other diverse origin.

The measles virus closely mimics small pox in certain parameters i.e., I) no vector, ii) no natural reservoir iii) vaccinable.

As the small pox is eradicated through vaccine, the measles is also eradicable by vaccination if effective and reliable vaccine is available.

### Conclusion

The parameters regarding the ocular complication refractoriness to therapy is:

- Duration of symptoms
- Severity of case at the 1<sup>st</sup> observation
- Unvaccinated
- The early and proper management in both eye and sight saving as the fair organ, except fair deal early and timely.
- The early administration of vit-A is pivotal for prevention of ocular complication.

### References

1. Becom J Koplik spots for record, an illustrated no to clin Rediatr 1972; 11: 161.
2. Hussey G, KLEINM, a randomized trial of Vit A in children with measles. N Eng T Med 1990; 323: 160.
3. Measles prevention JAMA; 1989, 261: 827.
4. Current trends in measles 1987 ARCH Dermatol 1988; 124: 1627.
5. Roels OA et al, The vitamins in the modern nutrition in health and disease ed. 5. Good Harf, RS and Shills ME eds-Philadelphia, Lea and Fibiger 1973.