

Children's Hospital No.2 Ophthalmology Department

RUBEOLA KERATITIS

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1. Introduction

2. Rubeola Keratitis

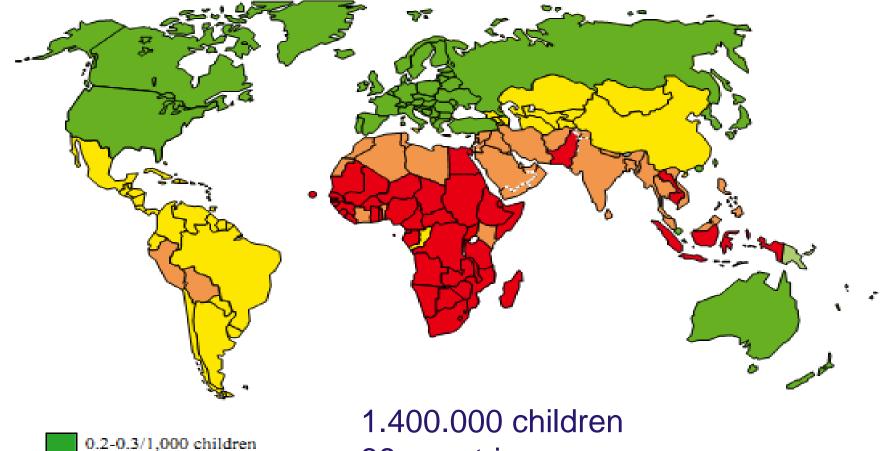
3. Research

4. Conclusion



INTRODUCTION

Introduction



0.4-0.6/1,000 children 38 COUNTRIES 0.7-0.9/1,000 children

1.0-1.5/1,000 children

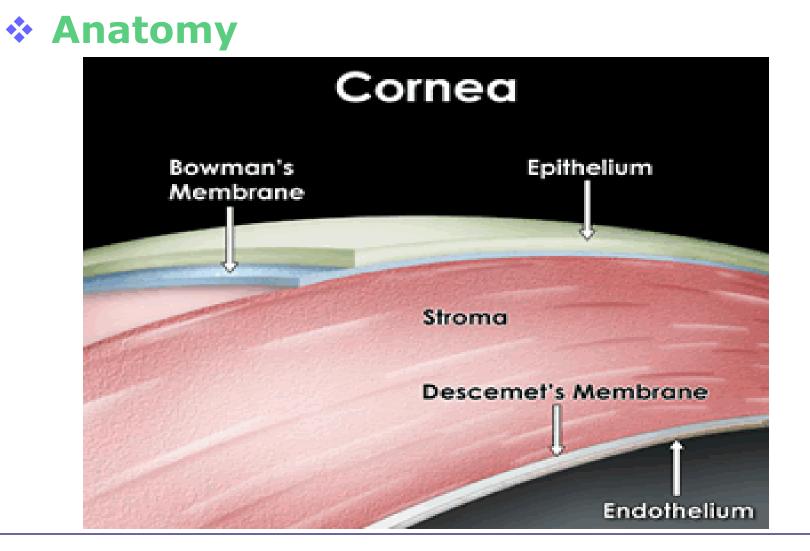
15 years

Introduction

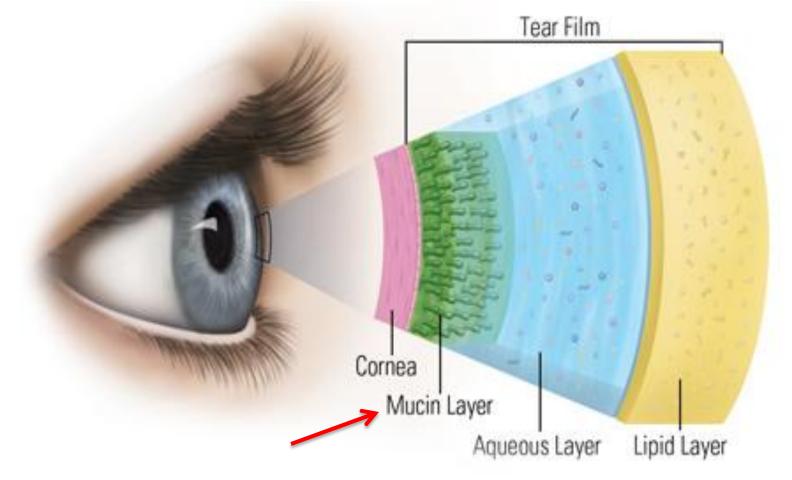
Table 5.1 Estimates of the proportion of children who are blind, by anatomical site and World Bank region. *EME* Established Market Economies, *MEC* Middle East Crescent, *FSE* Former Socialist Economies, *OAI* Other Asia and Islands, *LAC* Latin America and Caribbean, *SSA* sub-Saharan Africa

WB region	EME	FSE	LAC	MEC	China	India	OAI	SSA	ALL	ALL
No blind	50,000	40,000	100,000	190,000	210,000	270,000	220,000	320,000	1,400,000	
	Richest	est region (%) Poorest region (%			egion (%)	Number	Percentage			
Retina	25.0	44.3	46.4	42.4	24.9	16.7	15.8	20.0	353,000	25.2
Cornea	1.0	2.3	8.4	5.8	4.3	24.6	24.3	36.2	265,400	19.0
Whole globe	10.0	12.0	11.0	16.0	25.4	33.3	16.5	8.8	258,900	18.5
Lens	8.0	10.8	7.5	16.7	18.9	9.7	27.4	10.0	205,400	14.7
Optic nerve	25.0	14.8	11.7	7.4	13.6	6.1	7.5	9.6	136,700	9.8
Glaucoma	1.0	2.8	8.3	6.4	9.0	2.4	4.6	6.2	77,600	5.5
Other	28.0	8.0	4.4	2.6	2.3	3.0	1.5	4.8	58,200	4.2
Uvea	2.0	5.3	2.3	2.7	1.5	4.3	2.3	4.5	44,800	3.2
Total	100	100	100	100	100	100	100	100	1,400,000	100

Compiled from a database held by C. Gilbert at the International Centre for Eye Health, LSHTM



Physiology: Tear film



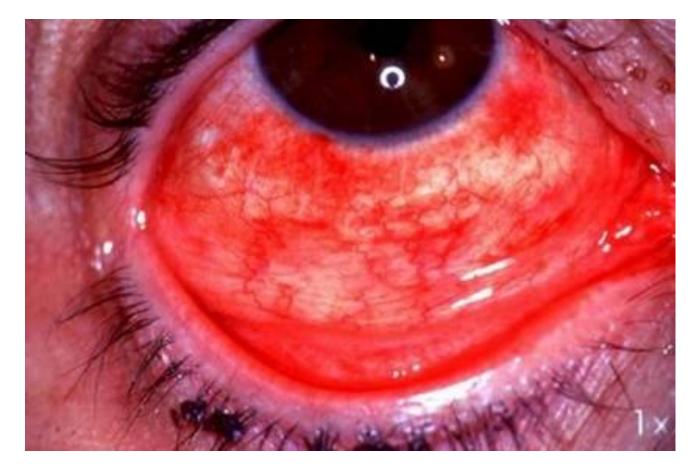
Physiology: Vitamin A

- Mucin layer and tear film
- Epithelialisation
- Rod cell and Rhodopsin

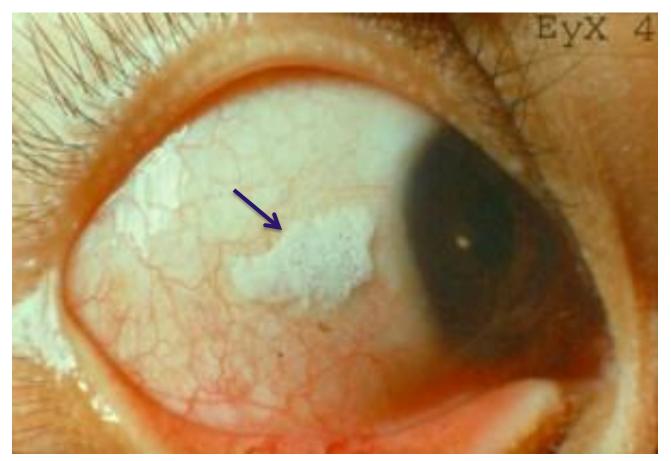
Signs: Conjunctivitis



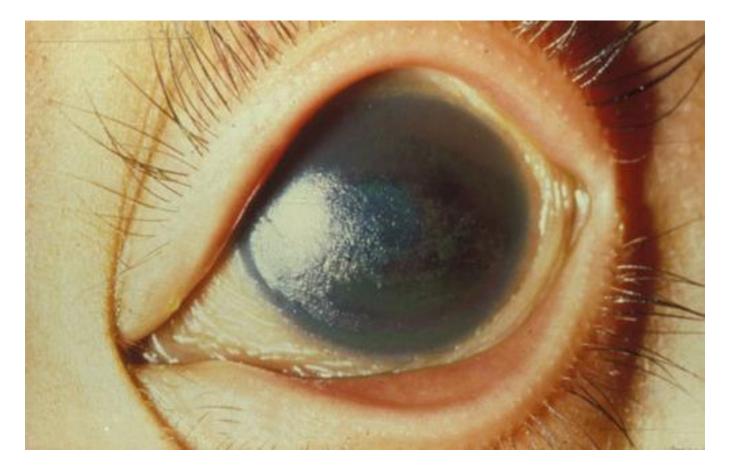
***Signs: Conjunctival hemorrhages**



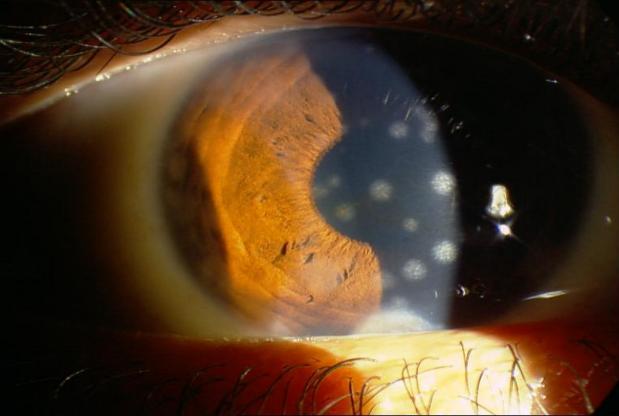
Signs: Bitot's spots



Signs: Xerophthalmia



*Signs: Superficial punctate corneal epithelial



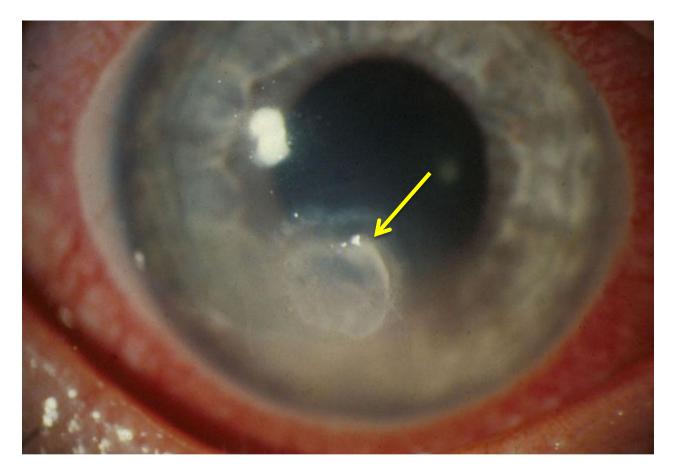
Signs: Keratitis



Signs: Corneal ulceration



Signs: Corneal scarring



Night blindness



Normal Vision

Night Blindness

***MEDLINE, 2000 Mar; PMID 10806435**

- 61 measles, < 15 y.o</p>
- 29.5% in both eyes.
- 65.6% had measles conjunctivitis.
- 22.9% had subconjunctival hemorrhages.
- 57.4% had superficial punctate corneal epithelial.
- 8.2% had corneal ulceration.

Cochrane Database of Systematic Reviews – December 8, 2010

- MEDLINE (1950 2010)
- Global Health (1973 2010)
- EMBASE (1980 2010)
- Latin American and Caribbean Health Sciences (LILACS)
- African Index Medicus (4/2010)
- Meta-Register of Controlled Trials
- Cochran Central Register of Controlled Trials

* 43 trials enrolling

Vitamin A supplementation (VAS):

- 100.000 UI : 6 12 months
- 200.000 UI : 13 60 months
- 1st 2nd 14th day

Result: Vitamin A supplementation

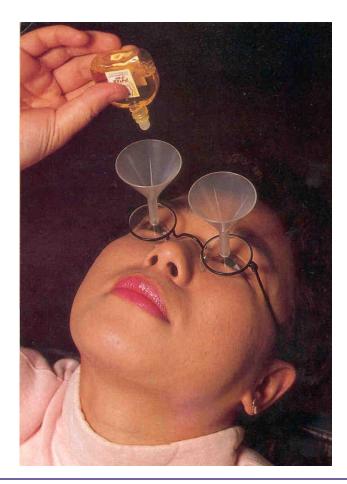
	Reduce	Relative Risk (RR)	Confidence Interval (CI)
Mortality	24%	0.50	95%
Diarrhea		0.85	95%
Vomiting		2.75	95%
Complication		0.76	95%



1. VITAMIN A



2. NOT use eye drops CORTICOID



3. EYE EXAMINATION



References



- 1. Allen Foster, Alfred Sommer (1987), "Corneal ulceration, measles and childhood blindness in Tanzania"; British Journal of Ophthalmology, 1987, 71, 331-343.
- 2. Clark Gilbert (2012), "Worldwide Causes of Blindness in Children"; Pediatric Ophthalmology Current Thought and Practical Guide, 46-60.
- 3. Clive E West (2000), "Vitamin A and Measles", Nutrition Reviews, Vol 58, No.2, 46-54.
- 4. Goergios P Pavlopoulos (2008), "Rubeola keratitis: a photographic of corneal lesions", PubMed, PMID 10831097.
- 5. Kayikcioglu O (2000), "Ocular funding in measles epidemic among young aldults", PubMed, PMID 10806435.
- Reddy V (1992), "Relationship between measles, malnutrition and blindness: a prospective study in Indian children"; American Journal Clinical Nutrition, 146, 924-930.
- 7. Pediatric Eye Disease Investigator Group (2008), "Primary Treatment of Rubeola Karatitis in Children Younger than 5 Years". *Ophthalmology*, 115 (3), pp.577-583.

THANK YOU !