RUBEOLA KERATITIS

Dr. Nguyen Thanh Danh
Ophthalmology Department of C.H.2
1. Introduction

2. Rubeola Keratitis

3. Research

4. Conclusion
Introduction

15,000 children
38 countries
15 years

<table>
<thead>
<tr>
<th>WB region</th>
<th>EME</th>
<th>FSE</th>
<th>LAC</th>
<th>MEC</th>
<th>China</th>
<th>India</th>
<th>OAI</th>
<th>SSA</th>
<th>ALL</th>
<th>ALL</th>
</tr>
</thead>
<tbody>
<tr>
<td>No blind</td>
<td>50,000</td>
<td>40,000</td>
<td>100,000</td>
<td>190,000</td>
<td>210,000</td>
<td>270,000</td>
<td>220,000</td>
<td>320,000</td>
<td>1,400,000</td>
<td></td>
</tr>
</tbody>
</table>

Richest region (%)

| 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
Rubeola Keratitis

- **Anatomy**
Rubeola Keratitis

- Physiology: Tear film
Rubeola Keratitis

**Physiology: Vitamin A**
- Throdopsin, tế bào que của võng mạc
- Tiết bã nhọn, tạo phim nước mắt
- Biệt hóa biểu mô, lành sẹo
- Tăng cường miễn dịch

**Vitamin A deficiency**
- Giảm cung cấp
- Giảm hấp thu
- Tăng sử dụng
- Tăng thái trừ
Rubeola Keratitis

- **Signs**: Conjunctivitis
Rubeola Keratitis

- Signs: Conjunctival hemorrhages
Rubeola Keratitis

- Signs: Bitot’s spots
Rubeola Keratitis

- Signs: Xerophthalmia
Rubeola Keratitis

- **Signs:** Superficial punctate corneal epithelial
Rubeola Keratitis

- Signs: Keratitis
Rubeola Keratitis

- **Signs:** Corneal ulceration
Rubeola Keratitis

- Signs: Corneal scarring
Rubeola Keratitis

- Night blindness

![Normal Vision](image1)

![Night Blindness](image2)
61 measles, < 15 y.o
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)
- Latin American and Caribbean Health Sciences (LILACS)
- Meta-Register of Controlled Trials
- Cochran Central Register of Controlled Trials
Research

- 43 trials enrolling
- 215,633 children under 5 y.o

- Vitamin A supplementation (VAS):
  - 100,000 UI: 6 – 12 months
  - 200,000 UI: 13 – 60 months
  - 1st – 2nd – 14th day
Result: Vitamin A supplementation

<table>
<thead>
<tr>
<th></th>
<th>Reduce</th>
<th>Relative Risk (RR)</th>
<th>Confidence Interval (CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mortality</td>
<td>24%</td>
<td>0.50</td>
<td>95%</td>
</tr>
<tr>
<td>Diarrhea</td>
<td></td>
<td>0.85</td>
<td>95%</td>
</tr>
<tr>
<td>Vomiting</td>
<td></td>
<td>2.75</td>
<td>95%</td>
</tr>
<tr>
<td>Complication</td>
<td></td>
<td>0.76</td>
<td>95%</td>
</tr>
</tbody>
</table>
CONCLUSION

1. VITAMIN A
2. NOT use eye drops CORTICOID
3. EYE EXAMINATION
References


THANK YOU!