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MANAGEMENT OF THE CHILD WITH COUGH OR DIFFICULT BREATHING
Global Burden

* Commonest cause of death

* 2 million deaths of children under 5 years

* 60% of these deaths are in infant

* All these deaths are due to pneumonia

* Treating children with pneumonia will greatly reduce mortality
Assess: -
  Ask
Look
Listen
1. How old is the child?
2. Is the child coughing? For how long?
3. Is the child able to drink?
4. Has the young infant (age < 2 months) Stopped feeding well?
5. Has the child had fever? For how long?
6. Has the child had convulsions?
Look, Listen (Child must be calm)

1. Count the breath in one minute

2. Look for lower chest indrawing

3. Look and listen for stridor

4. Look and listen for wheeze. Is it recurrent?

5. See if the child is abnormally sleepy, or difficult to wake

6. Feel for fever, or too cold

7. Check for clinically severe undernutrition
Classify the Illness
The child age 2 months - 5 years

Does child have danger signs?

1. Not able to drink
2. Convulsions
3. Abnormally sleepy or difficult to wake
4. Stridor in a clam child
5. Clinically severe undernutrition

Classify As:

Very severe disease
Treatment of very severe disease:

* Refer URGENTLY to hospital
* Give first dose antibiotic
* Treat fever, if present
* Treat wheezing, if present
* If cerebral malaria is possible, give antimalarial
Does Child have Pneumonia?

Signs: Lower chest indrawing

Classify as Severe Pneumonia
Treatment of Severe Pneumonia:

* Refer URGENTLY to hospital

* Give first dose antibiotic

* Treat fever, if present

* Treat wheezing, if present (if referral is not feasible, treat with antibiotic and follow closely)
B: - No chest indrawing, and

Fast breathing

(50 per minute or more if child 2 months up to 12 months;

40 per minute or more if child 12 months up to 5 years)

Classify as Pneumonia
Treatment of Pneumonia:

* Advise mother to give home care

* Give antibiotic

* Treat fever, if present

* Treat wheezing, if present

* Advise mother to return with child in 2 days for reassessment, or earlier if the child is getting worse
C:- No chest indrawing, and

No fast breathing

(less than 50 per minute if child 2 months up to 12 months;
Less than 40 per minute if child 12 months up to 5 years)

Classify as No Pneumonia: Cough or Cold
Treatment of No Pneumonia:
Cough or cold:

* If coughing more than 30 days refer for assessment

* Assess and treat ear problem or sore throat, if present

* Advise mother to give home care

* Treat fever, if present

* Treat wheezing, if present
Reassess in 2 days a child who is taking an antibiotic for pneumonia

<table>
<thead>
<tr>
<th>Signs</th>
<th>Worse</th>
<th>THE SAME</th>
<th>IMPROVING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Not able to drink</td>
<td></td>
<td>• Breathing slower</td>
</tr>
<tr>
<td></td>
<td>• Has chest indrawing</td>
<td></td>
<td>• Less fever</td>
</tr>
<tr>
<td></td>
<td>• Has other danger signs</td>
<td></td>
<td>• Eating better</td>
</tr>
</tbody>
</table>

| Treatment              | Refer URGENTELY to hospital                                        | Change antibiotic or refer                                         | Finish 5 days of antibiotics                                                   |
The Young Infant (Age<2Months)

Does Child have danger signs?

* Stopped feeding well
* Convulsions
* Abnormally drowsy or difficult to wake
* Grunting
* Wheezing
* Fever or feels too cold
* Cyanosis
Classify As: Very Severe Disease

Treatment:

* Refer URGENTLY to hospital for antibiotic by injection if any of the above signs
* Keep young infant warm
* give first dose antibiotic (preferably inj.)
Does child have pneumonia?

Signs:
* Fast breathing (60/minute or MORE) or
* Severe Chest indrawing

Classify As: Severe Pneumonia

Treatment:
* Refer URGENTLY to hospital
* Keep young infant warm
* Give first dose antibiotic
Signs:

* No fast breathing (< 60 per minute)
* No severe chest indrawing

Classify As:

No Pneumonia:
Treatment:
* Advise mother to give home care
* Keep baby comfortable warm
* Breastfeed frequently
* Clear nose if it interferes with feeding
* Watch for signs of illness

Advise Mother to Return if:
* Breathing becomes difficult
* Breathing becomes fast
* Feeding becomes problem
* The young infant becomes sicker
* High fever
Treatment Instructions:

Give an Antibiotic

* Give first dose on antibiotic in clinic

* Instruct mother on how to give the antibiotic for five days at home (or return to clinic for daily procaine penicillin injection)
<table>
<thead>
<tr>
<th>AGE or WEIGHT</th>
<th>Amoxycillin</th>
<th>Procaine Penicillin</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>125 mg / 5 ml</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Three time daily for 5 days</td>
<td>• Once daily for 5 days</td>
</tr>
<tr>
<td></td>
<td></td>
<td>I/M INJ.</td>
</tr>
<tr>
<td>&lt; 2 m (&lt; 5 kg)</td>
<td>2.5 ml</td>
<td>200,000 Units</td>
</tr>
<tr>
<td>2 months - 12 months (6-9 kg)</td>
<td>5.0 ml</td>
<td>400,000 Units</td>
</tr>
<tr>
<td>12 months - 5 years (10-19 kg)</td>
<td>10.0 ml</td>
<td>800,000 Units</td>
</tr>
</tbody>
</table>
Advise Mother to Give Home Care:

(For the child age 2 months – 5 years)

**Feed the child**

* Feed the child during illness
* Increase feeding after illness
* Clear the nose if it interferes with feeding

**Increase Fluids**

* Offer the child extra to drink
* Increasing breast feeding
* Soothe the throat and relieve the cough with a safe remedy
* Most important: In the child classified as having No Pneumonia: Cough or cold, watch for the following signs and return quickly if they occur:
* Breathing becomes difficult
* Breathing becomes fast
* Child is not able to drink
* Child becomes sicker

This child may have Pneumonia
# Treat Fever

<table>
<thead>
<tr>
<th>* Fever is high ( (\geq 39^\circ C) )</th>
<th>* Fever is not high ( (&lt; 39^\circ C) )</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Give Paracetamol</td>
<td>* Advise mother for home care</td>
</tr>
</tbody>
</table>

**Paracetamol dose:** → Every six hours

<table>
<thead>
<tr>
<th>Age or Weight</th>
<th>500 mg tablet</th>
<th>Syrup 120 mg 5ml</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 m – 12 m</td>
<td>0.25</td>
<td>5 ml</td>
</tr>
<tr>
<td>6-9 kg</td>
<td>0.25</td>
<td>5 ml</td>
</tr>
<tr>
<td>12 m – 3 yrs</td>
<td>0.25</td>
<td>5 ml</td>
</tr>
<tr>
<td>10-14 kg</td>
<td>0.25</td>
<td>5 ml</td>
</tr>
<tr>
<td>3 yrs – 5 yrs</td>
<td>0.5</td>
<td>10 ml</td>
</tr>
<tr>
<td>15-19</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Thank You
Treat Wheezing:

*Children with first episode of wheezing*

* If in respiratory distress → Give a rapid acting bronchodilator and refer

* If not respiratory distress → Give oral salbutamol for 5 days
Children with Recurrent Wheezing (Asthma)

Give a rapid acting bronchodilator
Assess the child’s condition 30 minute later

**IF:** RESPIRATORY DISTRESS OR ANY DANGER SIGN → **THEN** Treat for S.PNEUMONIA OR VERY VERY SEVERE DISEASE (Refer)

**NO RESPIRATORY DISTRESS AND:**
FAST BREATHING → Treat for Pneumonia (Include oral salbutamol)
NO FAST BREATHING → Treat for No Pneumonia (Include oral salbutamol)
<table>
<thead>
<tr>
<th>RAPID ACTING BRONCHODILATOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nebulized salbutamol (5 mg/ml)</td>
</tr>
<tr>
<td>Subcutaneous Epinephrine (adrenaline) (1:1000)</td>
</tr>
</tbody>
</table>
ORAL SALBUTAMOL

* Three times daily for five days

<table>
<thead>
<tr>
<th>AGE or WEIGHT</th>
<th>2 mg tablets</th>
<th>4 mg tablet</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 months – 12 months</td>
<td>½</td>
<td>¼</td>
</tr>
<tr>
<td>(&lt; 10 kg)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12 months – 5 years</td>
<td>1</td>
<td>½</td>
</tr>
<tr>
<td>(10-19 kg)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Ear Problem

Assess:

- Ask
- Look, Feel
Ask:

* Does the child have ear pain
* Does the child have pus draining from the ear
* For how long

Look, Feel

* Look for pus draining from the ear
* Or red immobile ear drum (by otoscopy)
* Feel for tender swelling behind ear
### Classify the Illness

<table>
<thead>
<tr>
<th>Signs:</th>
<th>MASTOIDITIS</th>
<th>ACUTE EAR INFECTION</th>
<th>CHRONIC EAR INFECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tender swelling behind the ear</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pus draining from the ear less than 2 wks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ear pain or</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red immobile ear drum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pus draining from the ear 2 wks or more</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Classify As:</th>
<th>MASTOIDITIS</th>
<th>ACUTE EAR INFECTION</th>
<th>CHRONIC EAR INFECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refer to urgently hospital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Give the first dose antibiotic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treat fever, if present</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Give paracetamol for pain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Give an antibiotic for 5 days</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Dry the ear by wicking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reassess in five days</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paracetamol for pain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refer for one assessment if possible</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dry the ear wicking</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treat fever if present</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paracetamol for pain</td>
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<td></td>
<td></td>
</tr>
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</table>
Dry the ear wicking

To dry the ear

* Roll clean, absorbent cloth into a wick
* Place the wick in the child’s ear
* Remove the wick when wet
* Replace the wick with a clean one unit the ear is dry
Sore Throat

Assess:

Ask

Look, Feel
Ask:

* Is the child able to drink
* Does the child have sore throat

Look, Feel

* Feel the front of the neck for nodes
* Look for exudate on the throat
### Classify the Illness

<table>
<thead>
<tr>
<th>Signs:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>* Not able to drink</td>
<td>• Tender, enlarged lymph node on neck</td>
<td>• White exudate on throat</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Classify As:</th>
<th>THROAT ABSCESS</th>
<th>STREPTOCOCCAL SORE THROAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Refer to Hospital</td>
<td>• Give benzathine penicillin or amoxycillin / ampicillin</td>
<td>• Give benzathine penicillin or amoxycillin</td>
</tr>
<tr>
<td>• Give benzathine penicillin or amoxycillin / ampicillin</td>
<td>• Treat fever, if present</td>
<td>• Give safe, smoothing remedy for sore throat</td>
</tr>
<tr>
<td>• Treat fever, if present</td>
<td>• Give paracetamol for pain</td>
<td>• Treat fever, if present</td>
</tr>
<tr>
<td>• Give paracetamol for pain</td>
<td></td>
<td>• Give paracetamol for pain</td>
</tr>
</tbody>
</table>
Give Benzathine Penicillin for Suspected Streptococcal Sore Throat

BENZATHINE PENICILLIN IM

A Single Injection

<table>
<thead>
<tr>
<th>&lt; 5 Years</th>
<th>600,000 units</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt; 5 Years</td>
<td>1,200,000 units</td>
</tr>
</tbody>
</table>

Or amoxycillin for ten days
Thank You