

**GRODNO STATE MEDICAL UNIVERSITY  
FACULTY OF FOREIGN STUDENTS**

# **CASE REPORT**

**1st Department of Pediatrics**

**Head of Department:** Prof. Maximovich N.A.

**Teacher:** Associate Prof. Tsikhan N.M.

**Student:** *Name*

**Study year:** 6<sup>th</sup>; **Group:** 6a

**Date:** 11.02.2020

# GENERAL DATA

- **NAME:** G.N.
- **GENDER:** male/female
- **AGE:** 3 years 3 months
- **DATE OF BIRTH:** 01.06.2016
- **DEPARTMENT:** Pulmonology
- **DATE OF ADMISSION:** September 12<sup>th</sup>, 2019
- **PRELIMINARY DIAGNOSIS:** Acute bronchitis
- **DATE OF DISCHARGE:** September 19<sup>th</sup>, 2019
- **FINAL DIAGNOSIS:** Community-acquired bilateral segmental pneumonia. Lung destruction (pneumocele). Acute nasopharyngitis. CHD (VSD).

# COMPLAINTS

- Febrile Fever (38.5°C)
- Wet productive cough
- Respiratory distress
- Malaise
- ....

# HISTORY

Patient got sick 2 days ago, when temperature increased to febrile level (38.5°C), appeared cough and dyspnea...

He also experienced vomiting (2 times after drinking tea) and refused to eat...

Condition got worse, thus boy had been hospitalised at Lida Local Hospital. Further treatment failed and patient was transferred to Grodno Regional Children's Hospital in 2 days .

**Received treatment:** paracetamol, ambroxol (outpatient)  
amoxicillinum (inpatient).

# PAST MEDICAL HISTORY / FAMILY HISTORY

## **Vital anamnesis:**

- He was born at full term (39 weeks of gestational age) by normal spontaneous vaginal delivery after an uncomplicated gestation.
- Birth weight - 3250g, length 50 cm.

**Past medical history:** URTI (6-mo-old, 1-yr-old ), pneumonia (1,5-yr-old) ...

## **History of vaccination:**

- He was vaccinated according to the National Schedule/ Individual Schedule. Parents denied any side reactions.

**Allergic anamnesis:** food allergy (cow's milk).....

## **Family history:**

- There was no family history of genetic diseases, primary immune deficiency, heart or lung diseases, cystic fibrosis, congenital malformations or other disorders. None of his family members had asthmatic or allergic symptoms.

# PHYSICAL EXAMINATION

**Condition severity:** critical/ severe/moderate/ normal

**Vital signs:** T 37.6°C, HR 115/min, RR 25/min, BP 95/55mmHg

**Weight** - 41 kg; **Height** - 172 cm

**Physical Growth Assessment** : z-score (weight-for-length/height ) = ...SD

z-score (length/height-for-age ) =            z-score (BMI) =

**Conclusion:** wasting (acute undernutrition) / stunting (chronic undernutrition) / normal

**Behavioral development:** list key developmental milestones of a baby

**Skin:** color (pale, acrocyanosis...), dry or ..., rash (maculopapular on legs...)

**Mucous membrane:** no pathological changes.../ dry / multiply oral aphtous/ hyperemic pharynx mucosa ...

**Lymph nodes:** unremarkable (not enlarged) / neck lymph nodes are swollen (diameter up to 2 cm), tender...

# PHYSICAL EXAMINATION

**RS:**

***Use of accessory muscles during breathing:*** nasal flaring , intercostal retraction...

***Lung auscultation:*** breathing (hard breathing, diminish vesicular breathing) , crackles / rales / wheezing.

**CVS:**

***Inspection:*** cardiac hump, chest deformity...

***Heart auscultation:*** I, II heart sounds (clear/ muffled); murmurs (systolic/diastolic; at apex/ heart basis/ 2<sup>nd</sup> / 3<sup>rd</sup> .. intercostal space...).

**ABDOMEN:** nondistended / protuberant ...; soft, without tenderness on palpation/ mild tenderness at epigastrium ....; bowel sounds – normal/ diminished.

**LIVER AND SPLEEN :** not enlarged /.. (+ 1) cm below the costal margin.

**STOOLING PATTERN:** Normal (frequency/ color/ consistency) or constipation (frequency/ colour/ consistency) or diarrhea (frequency/ color/ consistency)

**URINATION:** frequency

**CNS:** without pathological changes / conscious/ distressed/ aggressive/ drowsy/ sleepy ...convulsions (tonic / clonic....), menigeal signs -positive/negative

# PLAN OF LABORATORY TESTS AND INVESTIGATIONS

Propose your ideal plan of examinations for your patient  
(first-line, second-line...)

1. CBC with differentials
2. Urinalysis
3. ECG
4. Chest X-ray
5. Consultation of allergist, ENT ...

...

***NB !!! For second-line examination*** you have to indicate reasons of their recommendation (Lung CT - to exclude lung abscess; Mantoux test – resistant for standard treatment pneumonia /contact with patient with TB)



# LABORATORY FINDINGS

(already obtained in patient)

## CBC (differentials)

- WBC –  $17.7 \times 10^9/l$
- RBC –  $4.1 \times 10^{12}/l$
- Hb – 108 g/l
- HCT – 31%
- MCV – 76fl
- MCHC – 348g/dl
- Neutrophils – 92%
- Eosinophils – 1%
- Basophils – 0%
- Monocytes – 3%
- Lymphocytes – 4%
- Platelets –  $361 \times 10^9/l$
- ESR – 41 mm/h

## Urinalysis

- Color (yellowish/dark),
- Transparency (clear/ cloudy),
- pH (5.4)
- Specific gravity (1021),
- Protein - (0.5 g/l),
- Glucose and ketones - positive/negative
- Nitrites - (positive/negative )
- Epithelial Cells (type), WBC, RBC (normally shaped or dysmorphic ) - cell number in view fields (3-4-3) or average number in mcl (3.5/mcl)
- Casts – (hyaline casts 2-3-0)
- Crystals – (oxalates ++ / phosphates +)
- Bacteria - (++)/neg)
- Nitrites - (positive/negative )

## Capillary blood gas

- pH – 7.375
- pCO<sub>2</sub> – 32.4mmHg
- pO<sub>2</sub> – 58.9mmHg
- Lactate – 2.3mmol/l
- ....

**NB!!!** You have to distinguish by red color all parameters which were pathologically changed

# INVESTIGATIONS

(already obtained in patient)

- **ECG:** regular sinus rhythm / sinus arrhythmia.....; bradycardia (42/min); QRS angle 76 grade; AV block, Type 2 Second-degree (Mobitz II)
- **Abdomen USG:** hepatosplenomegaly .....
- **Chest X-ray:** focal infiltrates in both lungs
- **Upper-GI Endoscopy:** GER 2 grade
- **Consultation of other specialists:**  
ENT: otitis media (right side)  
...

# DIAGNOSIS

**Dx:** Community-acquired bilateral segmental pneumonia .....

**Complications:** Lung destruction (pneumocele).

**Comorbidity:** Acute nasopharyngitis. CHD (VSD)

# TREATMENT

**Regimen:** bed rest/ no restriction/ activity restriction ...

**Diet:** no restriction / fluid restriction/ increase fluid intake ...

## **Medications:**

- Vancomycin - 100mg TID IV (40mg/kg/d)
- Acetylcystein - 100mg BID PO
- Ibuprofen (200mg/5 ml ) – 5 ml PO if fever higher 38.5C (single dose 5 mg/kg, max QID)

other.....