



*Differential diagnosis of new coronavirus infection with other
viral infections and atypical pneumonias*
SELECTED REFLECTIONS

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Poland



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POLISH CONTEXT OF COVID19

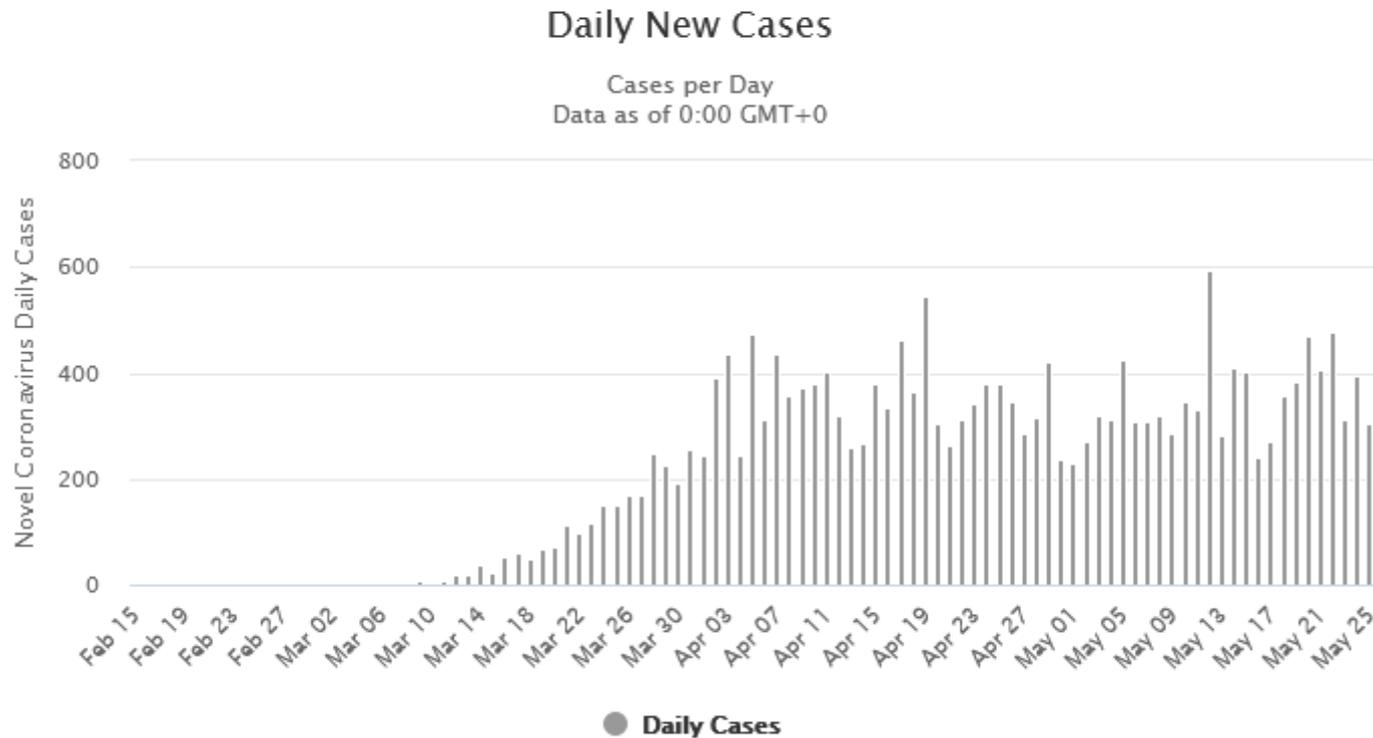
26/05/2019

- Total cases - 22,074
- New cases - +443
- Total recovered - 10,020
- Active cases - 11,030
- New deaths - 17
- Serious, critical - 11,030
- Deaths / mln population – 27
- Total tests / mln population - 11,030

POLISH CONTEXT OF COVID19

26/05/2019

Daily New Cases in Poland



DIFFERENTIAL DIAGNOSIS

PRACTICAL QUESTIONS

in Poland

- The role of PCR diagnosis of COVID19
- The role of antibodies tests
- The role of chest HRCT
- **CLINICAL DIFFERENTIAL DIAGNOSIS
WITH OTHER ATYPICAL PNEUMONIAS**
- **PRACTICAL ASPECTS OF INFECTION
PREVENTION**

COVID-19: clinical presentation

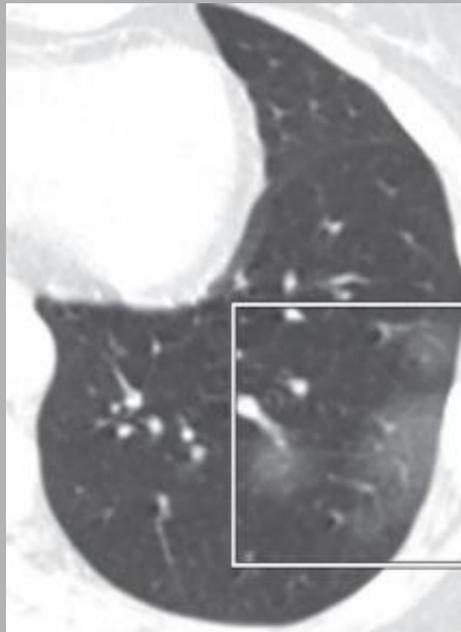
Watch for symptoms

People with COVID-19 have a wide range of symptoms – ranging from mild symptoms to severe illness.

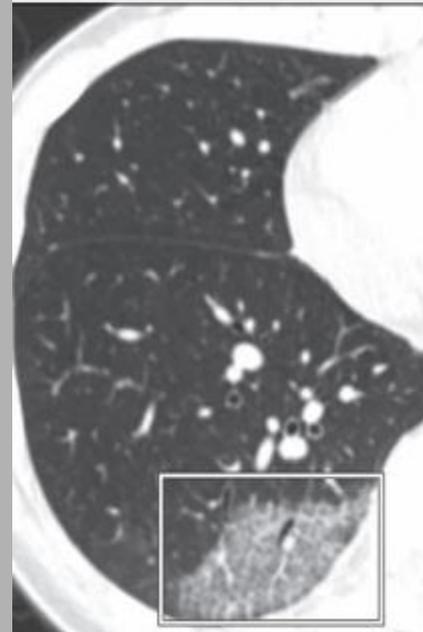
These symptoms may appear **2-14 days after exposure to the virus:**

- Fever
- Cough
- Shortness of breath or difficulty breathing;
- Chills
- Repeated shaking with chills;
- Muscle pain
- Headache
- Sore throat
- New loss of taste or smell.

Early stage COVID-19 pneumonia



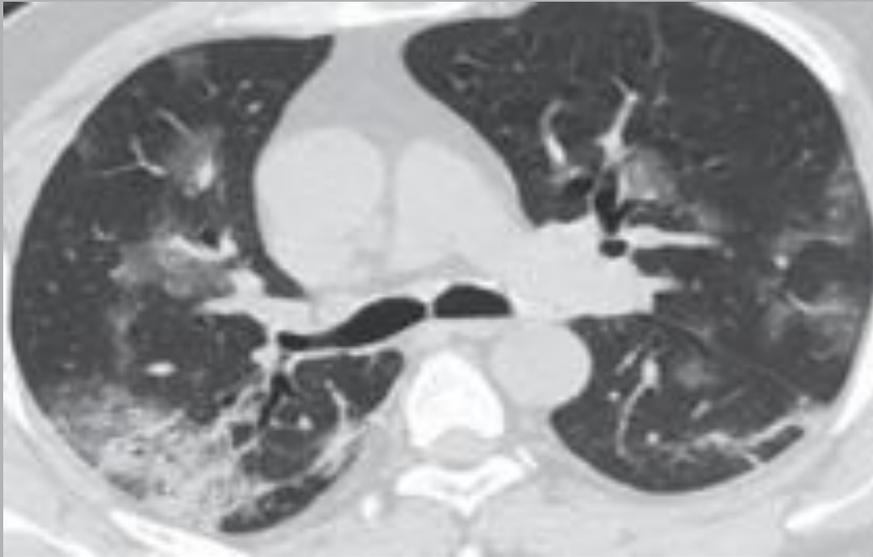
Day 2 - GGO



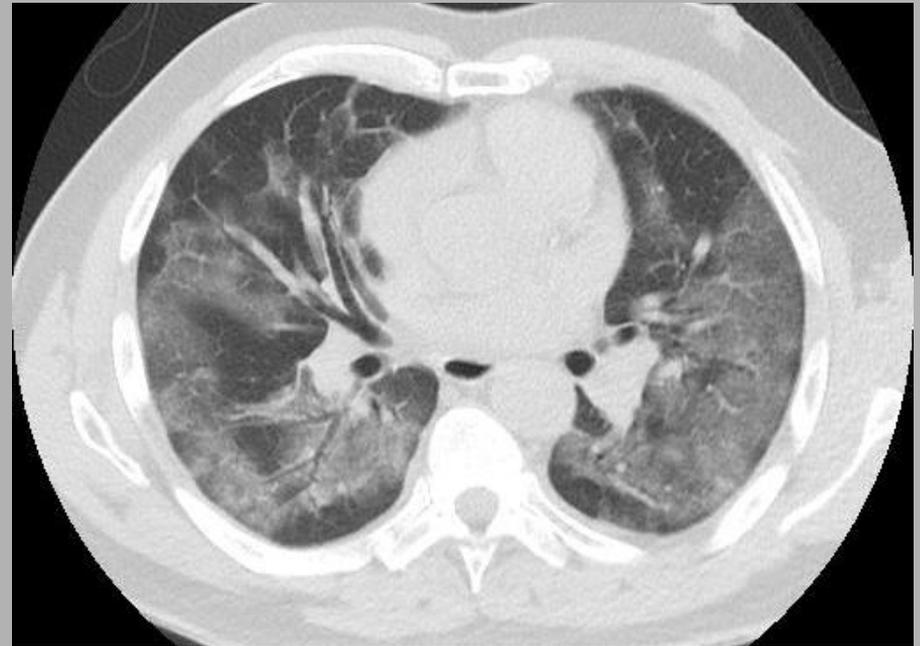
Day 5 – “crazy paving”

ERS resources

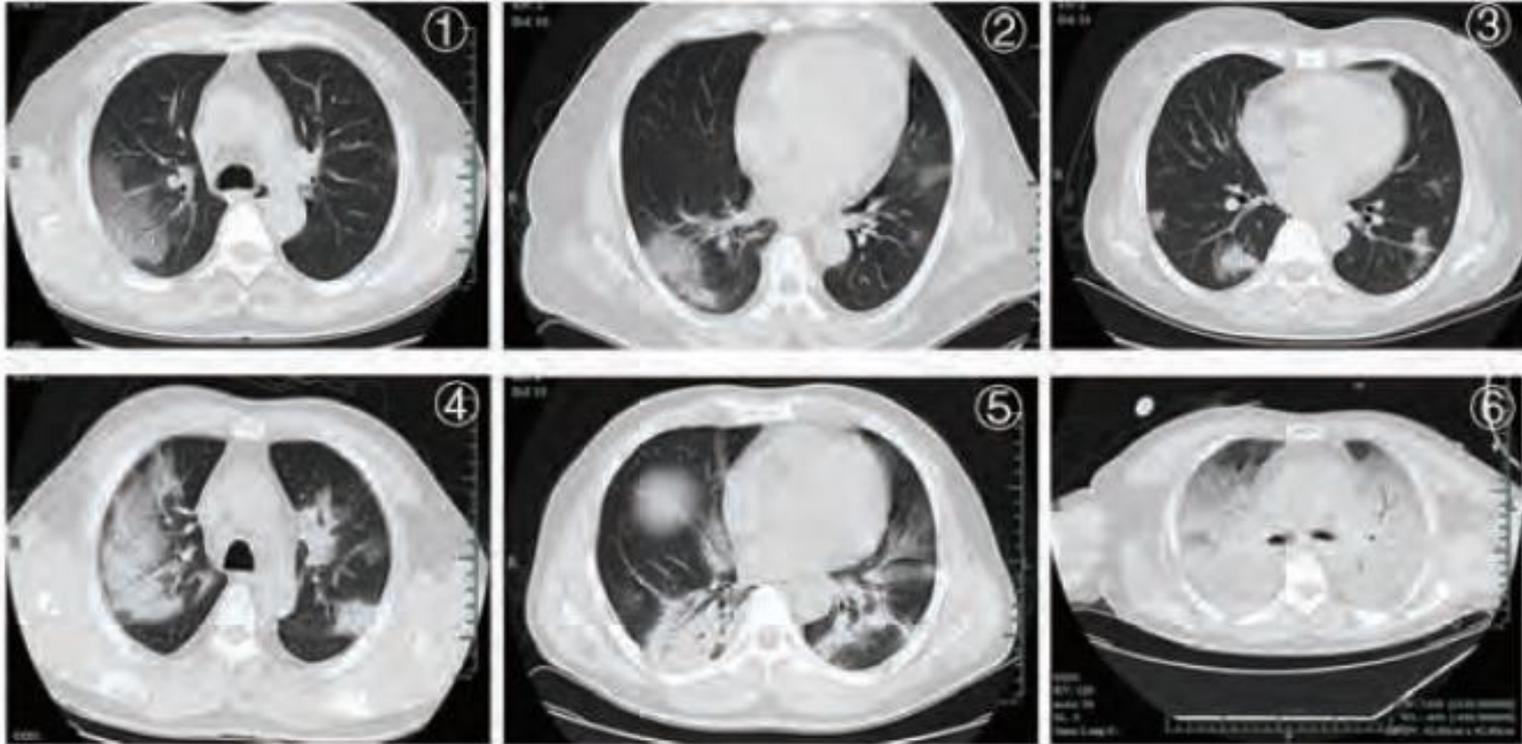
Advanced stage COVID-19 pneumonia



Day 7 – GGO, consolidation
& fibrotic streaks



Day 8 – diffuse bilateral GGO,
consolidation



Typical CT features of COVID-19 :

Figure 1, Figure 2: patchy ground glass opacities;

Figure 3: nodules and patchy exudation;

Figure 4, Figure 5: multifocal consolidation lesions;

Figure 6: diffuse consolidation, "white lung".

Application of Bronchoscopy in the Diagnosis and Management of COVID-19 Patients



Figure 7: Bronchoscopic manifestations of COVID-19: bronchial mucosa swelling and congestion; large amounts of mucus secretions in the lumen

Clinical Classification:

1 Mild Cases

The clinical symptoms are mild and no pneumonia manifestations can be found in imaging.

2 Moderate Cases

Patients have symptoms such as fever and respiratory tract symptoms, etc. and pneumonia manifestations can be seen in imaging.

3 Severe Cases

Adults who meet any of the following criteria: respiratory rate ≥ 30 breaths/min; oxygen saturation $\leq 93\%$ at a rest state; arterial partial pressure of oxygen (PaO_2)/oxygen concentration (FiO_2) ≤ 300 mmHg. Patients with $> 50\%$ lesions progression within 24 to 48 hours in lung imaging should be treated as severe cases.

4 Critical Cases

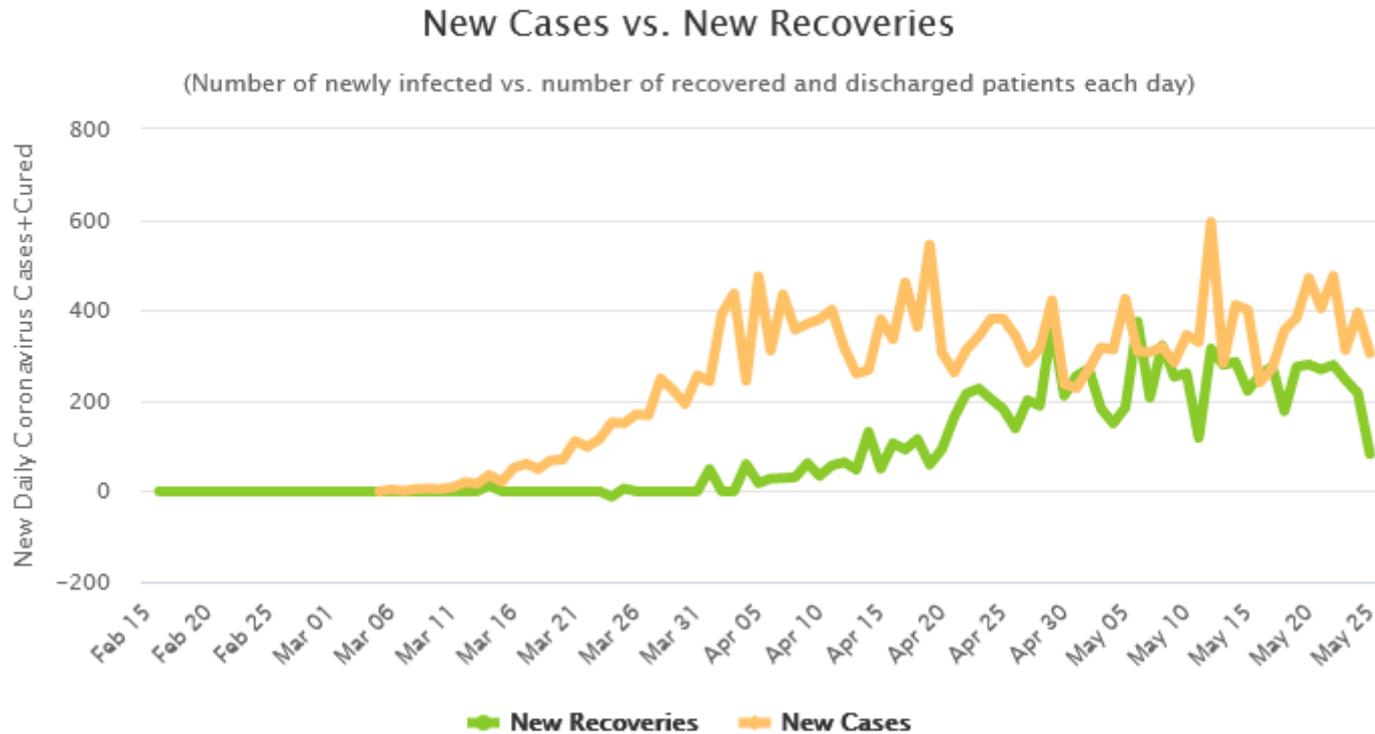
Meeting any of the following criteria: occurrence of respiratory failure requiring mechanical ventilation; presence of shock; other organ failure that requires monitoring and treatment in the ICU.

Critical cases are further divided into early, middle and late stages according to the oxygenation index and compliance of respiratory system.

POLISH CONTEXT OF COVID19

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Newly Infected vs. Newly Recovered in Poland



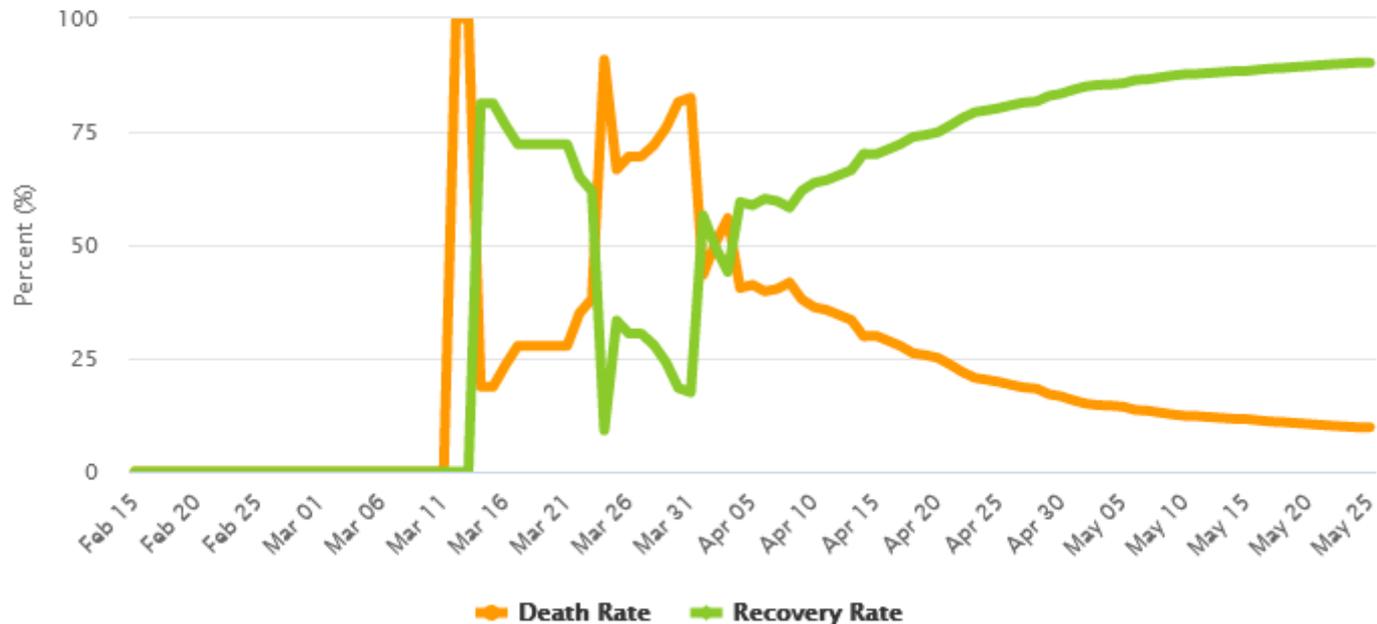
POLISH CONTEXT OF COVID19

26/05/2019

Outcome of Cases (Recovery or Death) in Poland

Outcome of total closed cases (recovery rate vs death rate)

(Cumulative total deaths and recoveries over cumulative number of closed cases)



Current problems to be solved in polish hospitals due to the COVID-19 epidemic

- The role of RT-PCR diagnostic tests
- Location and concentration of patients
- Staff Relations

Screening of patients before admission to hospital to identify asymptomatic infection

- There are no studies confirming the effectiveness of this strategy
- There are no studies confirming the diagnostic effectiveness of RT-PCR in people with asymptomatic infection

The problem of too frequent suspicions

- Threats related to too frequent suspicion of COVID-19

Delay of proper therapy

No insulation needed



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