

ISBD WEBINAR, 22nd January 2021

The Impact of COVID on BD

Petros Sfikakis, Athens University Medical School, Greece

1. How many patients with BD have tested positive for COVID
2. Did these patients have any co morbidities apart from BD
3. Did COVID exacerbate their BD symptoms
4. How did a diagnosis of COVID affect the treatment regime
5. What was the outcome for patients with BD who tested positive for COVID
6. What advice was given to patients with BD with regards to shielding

SARS-CoV-2 infection is asymptomatic in nearly half of adults with robust anti-S RBD antibody response

Between June-November 2020, we assessed plasma antibodies against SARS-CoV-2 nucleocapsid-protein in 4,996 members (aged 18-82 years; 34.5% men) of the National and Kapodistrian University of Athens. The weighted overall prevalence was 1.6% and monthly prevalence correlated with viral RNA-confirmed SARS-CoV-2 infections in Greece the same period. Notably, 49% of seropositive cases reported no history of SARS-CoV-2-related clinical symptoms and 33% were unsuspected of their previous infection. Additionally, levels of anti-SARS-CoV-2 antibodies against the spike-protein receptor-binding domain were similar between symptomatic and asymptomatic individuals, irrespective of age and gender. Using FDA-EUA-approved assays, these results support the need of such studies for pandemic evaluation and highlight the development of robust humoral immune responses even among asymptomatic individuals. The high percentage of unsuspected/asymptomatic active civilians, which may contribute to community transmission for more days than aware self-isolated cases, underscores the necessity of measures across the population for the efficient control of the pandemic

monthly seroprevalence of COVID antibodies among 4,996 active civilians (NKUA members, mean age of 37), followed the trend of confirmed COVID cases recorded in Greece from March to November 2020

Cumulative number of CoVID cases in Greece

140000
120000
100000
80000
60000
40000
20000
0

26/2/2020 26/3/2020 26/4/2020 26/5/2020 26/6/2020 26/7/2020 26/8/2020 26/9/2020 26/10/2020 26/11/2020

Dates

Weighted for age/sex seroprevalence of Anti-CoVID Abs (%)

6
5
4
3
2
1
0

SARS-CoV-2 infection is asymptomatic in nearly half of adults with robust anti-S RBD antibody response

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August: Dimitris, aged 44, chef, BD in remission

- Fifteen year history of BD (orogenital, arthritis, uveitis, pseudopapullitis), no comorbidities
- Current treatment: azathioprine 50 mg/day
- Positive test for anti-COVID antibodies (required by employer) (anti-S IgG, 5-fold higher than cut-off)
- Previous **COVID** infection **unsuspected ... denied any relevant symptoms** or exacerbation of BD during the past 6 months, treatment unchanged
- Antibody test repeated after 4 months: negative

September, Lambros, aged 28, electrician, BD in remission

- Two year history of severe BD (orogenital, arthritis, uveitis, CNS involvement), no comorbidities
- Current treatment: iv Infliximab 7.5 mg/kg every 8 weeks, sc MTX 20 mg/week, Medrol 6 mg/d, cotrimoxazol prophylaxis
- COVID diagnosis at the 3rd week after last Infliximab by PCR, after close contact with a confirmed case
- **Entirely asymptomatic**, denied any exacerbation of BD, treatment unchanged
- 2nd PCR (+) 17 days
- 3rd PCR (–) 25 d
- High anti-S (IgM+IgG) titers after 3 months

October: Antonis, aged 40, police officer, BD in remission

- 14 year history (orogenital, arthritis, uveitis), no comorbidities
- Current treatment: Colchicine 1X1 (AZA until spring)
- COVIDS diagnosis by PCR after close contact with a confirmed case
- ...next day he developed **low-grade fever, myalgias & fatigue** lasting for 3 days.. **Anosmia** on 7th day persisting for 2 months
- Denied any exacerbation of BD, treatment unchanged
- High anti-S (IgM+IgG) titers after 2 months

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1. How many (our cohort = 100) patients with BD have tested positive for COVID.....n=3 men
2. Did these patients have any comorbidities apart from BD.....NO
3. Did COVID exacerbate their BD symptoms.....NO
4. How did a diagnosis of COVID affect the treatment regime.....DID NOT
5. What was the outcome for patients with BD who tested positive for COVID.....EXCELLENT
6. What advice was given to patients with BD with regards to shielding.....as general population

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