

COVID-19 Clinical Care

Jonathan Vilasier Iralu, MD, FACP
Indian Health Service Chief Clinical Consultant
for Infectious Diseases



Testing update

Preferred reference lab test is the naso-pharygeal swab PCR assay

- * Cepheid Xpert nucleic acid amplification assay just arriving now at IHS sites
- * Abbott ID NOW COVID-19 device has arrived at some IHS sites
- qSARS-CoV-2 IgG/IgM Rapid Test (Cellex): FDA EUA
 - * Lateral flow immunoassay strip with bands for IgG and IgM: 10-20 minute turn around

Clinical Presentation Update Neurologic manifestations of COVID-19 in ARDS

(Mao et al, Jama Neuro, 4/20/20)

*214 COVID patients with ARDS at Huazhong U in Wuhan, China

- ♦ Mean age 52.7 years, 40.7% male, 41% severe, 59% nonsevere
- ❖36.4% had neurologic manifestations
- *Dizziness, headache, smell/taste impairment common in all
- Comparison of severe c/w non-severe pneumonia patients

❖ Cerebrovascular Disease
5.7% vs 0.8%

❖ Impaired Consciousness
14.8% vs 2.4%

♦ Skeletal muscle injury 19.3% vs 4.8%

Clinical Presentation Update Coagulopathy and Antiphospholipid Abs in COVID 19

(Zhang et al, NEJM, 4/8/2020

- Initial case report of 69 yo male with COVID-19
 - Leukocytosis, thrombocytopenia, elevated PT and PTT present
 - *Positive anticardiolipin IgA, anti-Beta2 glycoprotein I IgA and IgG
- * Two more patients identified with identical findings
- No Lupus anticoagulant detected
- * All three patients had multiple cerebral infarctions

Treatment Update: Compassionate use Remdesivir with severe COVID-19 (Grein et al, NEJM 4/10/2020)

- * 61 patients enrolled with O2 sat \leq 94%
- * Remdesivir 200 mg IV x 1 then 100 mg IV daily x 9 days
- ❖ 53 patients analyzed (57% on ventilators, 8% on ECMO)
 - ❖ 68% had improved oxygenation at median 18 days
 - ❖ 57% of intubated patients were extubated
 - ❖ 47% discharged home
 - **❖** 13% died

Need randomized, controlled trial data

IDSA COVID-19 Treatment guidelines

Released 4/11/2020

- *Treatments recommended "only in the context of clinical trials"
 - *Remdesivir
 - Hydroxychloroquine monotherapy
 - Hydroxychloroquine/Azithromycin
 - ❖ Lopinavir/ritonavir
 - ❖ Convalescent serum
 - ❖ Steroids for ARDS
- *Recommended against steroids for pneumonia

"Knowledge gaps" abound

More COVID-19 Training

- *CDC: https://www.cdc.gov/coronavirus/2019-ncov/hcp/index.html
- *ACP Physician Handbook: https://www.acponline.org/clinical-
 information/clinical-resources-products/coronavirus-disease-2019-covid-19-information-for-internists
- *U of Washington: https://covid-19.uwmedicine.org/Pages/default.aspx
- *Brigham and Women's Hospital: covidprotocols.org
- *IDSA: https://www.idsociety.org/practice-guideline/covid-19-guideline-treatment-and-management/

