COVID19: Managing Autoimmune, Psychiatric and Trauma Responses

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Learning Objectives

- Provide an overview of COVID-19 medical psychiatry and autoimmune cascades in a pandemic situation
- Review and apply pharmaceutical learnings from previous pandemics to nCov-SARS-2 2019
- Discuss impacts of non-prescription and alternative interventions used by the population
- Empower clinicians and patients’ safety and HOPE/resiliency through an overview of trauma-informed care
- Touch on RNA and intergenerational trauma and mitigation of trauma risk factors in a crisis
Initial Thoughts

- How do we grieve for a culture and societal connections that have been abruptly taken away from us?
- Introversion vs extroversion
- FMEA and desire to lay blame in the face of powerlessness
- Humanity means that we have the wherewithal to engage in intelligent concern for each other
  - It's not about age, race, sex, gender or religion
  - It's about responding to the threat by an unknown assailant with unconditional embracing of our equality

- A lot of very complex theories are being condensed and pulled together into short, bite sized encapsulations. The interpretations are mine and each of these topics blow out into their own literature and theories. In my defense, this is a 2 year course being condensed into 20 minutes...
The Perp: COVID-19

- Observed and reported up on unusual signalling in Oceania Summer 2019 in WHO data with potentially zoonotic etiology

- Clinical Observations (not present in all and not inclusive)
  - Increased SCR/ BUN
  - ARF
  - Fever
  - Hypotension
  - Marked left shift (greater than 90% neutrophils: WBC)
  - Fatigue and malaise
  - Opacities on CXR.
  - Co-existing autoimmune cascade that coexists (psychiatry, RA, transplant, DM, autonomic, dyslipidemia, asthma). I include psychiatry in here as there is a good body of evidence regarding interleukins, cytokines and psychiatry.
  - Potential- later stages present with a type of MSOF, RBC dyscrasias

- Dengue fever and COVID-19 and geopolitical/geographic exposure and clinical experience observations
What is Medical Psychiatry?

- The interface between all things psyche and all things physical and how one impacts on the other
  - This works two ways, both positive and negative
Lessons Learned: Autoimmune

- Spanish Influenza 1918-1920
- nCov-SARS-1 2003
- H1N1 2009-2010

- What populations may be at risk?
- Cytokine review and interleukins (esp. 6 and 8)
  - Review of systems including psychiatry
  - Diabetes, RA, ESR/CRP impacts, Neuro (MS etc), Crohns
- Weathering and awareness of the upcoming cytokine storm
- Neurological vs cardiac perspectives and observations
  - 2009 to 2020...what is different?
Relationship Status: It’s Complicated
# Relationship Status: Managing Loss and Divorce

- #1- Understand yourself and relationship with the “Ex”
  - Respect the your thoughts and feelings
  - What do visitation rights look like?
  - There is going to be a change in dopamine and serotonin
  - Past traumas, ADHD, learning disabilities
  - Drug interaction impacts

- Trauma and psychology
- Grief and grieving
- Acknowledging and accepting the grief
- Validation of emotions
- Kubler-Ross model cycle of grief and loss
Pavlov, Maslow and Toilet Paper

- It's all about the safety
  - No safety means no executive higher processes
  - We hear the panic bell on the media and do more than just salivate
  - No higher processes means non-clear thinking
  - Non-clear thinking means we operate at a root animal emergency level mindset
  - Means impaired critical thinking 😞
  - Means we as clinicians and patients may make improper choices

- Action and reaction and the impacts of PROJECTION
Think of the impact of the words and semiotics

There is no cure. This presentation will **not** go into septic or ventilator management, antimicrobial options, ARDS, VAP, PPI’s, NSAIDs, inotropes etc.

- Far more skilled clinicians than I speak to these evidence based guidelines

What are patients trying? Chloroquine, Hydroxychloroquine
- Including tropical fish grade chloroquine!

Licorice, umckaloabo, periwinkle, DHG, zinc, elderberry, echinacea, capsaiacin, garlic, vodka, filtering Scotch through a kilt etc. etc.
- What does that mean to clinicians and patients?
Trauma and You, and our next three generations...

- Story time about the Great Depression
  - Potential impact on abdominal girth
  - It takes 21 days to change a behaviour
  - RNA memory encoding of the interface impact from the trauma and behaviours

- HOPE, Resiliency and Empowerment
  - Holistic, Outcome, Personalized, Empowerment

- Mitigating Risk and Staying Sane
  - It's all about you and your desires
    - Play therapy
    - Online shopping
    - Learn a new language
    - Take a course
    - Phone-a-friend
    - The list is endless
  - Caveats and cautions
Medications and You and Your Patients

- Evidence based medicine to make evidence based decisions
- Let your prefrontal cortex work, not your amygdala
  - AKA- think smarter, not harder
- Don’t be afraid to think outside the box, there is no playbook
  - Don’t be paralyzed from critical decisions if 100% of the information isn’t available
  - Non-maleficence, benevolence, autonomy and justice must guide us
- TAIDCC- #COVID19RX must fit each of the pieces in this mnemonic
- Trauma history means when dealing with serotonin, dopamine, norepinephrine- start and go EXTRA slow. There will be more activation and adverse effects across body systems
- “Home remedies” that pop up on patient BPMH’s will have drug interactions too -> even the licorice root, zinc and the kilt-filtered Scotch
- Stressed traumatized people going through grief will almost always not make the most logical, safe choice
  - We need to be there for them and their families.

- It’s complicated and like a bad romance, but look after yourself and please practice good caring and sharing
• “We have one of the most important commodities right now in our health and knowledge. Giving and sharing with those less fortunate or struggling is another way to share that, which is what we call humanity. The best way to manage a crisis is controlling the narrative, planning, then practice literally one minute, one patient, and one case at a time.”

• “To do too many risks being overwhelmed. In closing, losing self-care is to lose your higher-level thinking, as well as your knowledge and skills for patient advocacy and care that improves patient outcomes. And that would be a loss to all, the most tragic COVID casualty.”
Resources

- Tan K, Prerna A, Leo YS Surveillance of H1N1-related neurological complications. Lancet Neurol 2010;9 (2) 142-14


- Lamoure J, Stovel J, Sanghera N. Optimizing Pain Management. Pharmacy Practice 2013 June: 29 (3); pp. 16-20, 27-28
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