Neuro Network

GUILLANE-BARRE X COVID-19

A Case Study By Sudiksha Reddy and Shreya Sunil

WHAT IS GUILLANE-BARRE SYNDROME?

Guillane Barre Syndrome (GBS) is a condition in which the immune system attacks the nerves.

WHAT IS COVID-19?

Corona viruses are RNA viruses that cause respiratory diseases. There are multiple types of viruses, varying from person to person.

Symptoms

- PAIN IN MUSCLES
- TINGLING IN FEET AND LEGS
- ABNORMALITY WALKING
- PROBLEMS WITH COORDINATION
- DIFFICULTY WITH SWALLOWING AND EATING
- DIFFICULTY SPEAKING
- FACIAL MUSCLES WEAKNESS

- HEADACHE
- NAUSEA
- VOMITING
- DIZZINESS
- DISORDER OF CONSCIOUSNESS
- COUGH
- SOAR THROAT

Diagnosis/Treatment

DIAGNOSIS:
- LUMBAR PUNCTURE
  - LAYMAN'S TERMS: A SPINAL TAP

TREATMENT:
- NO CURE
- SPECIAL BLOOD TREATMENTS
- PHYSICAL THERAPY

DIAGNOSIS:
- PCR TEST

TREATMENT:
- NO CURE
- QUARANTINE AT HOME
- FLU MEDICINE
- DRINK WATER

GUILLANE-BARRE X COVID-19

A Research Study By: Shreya Sunil

GUILLANE-BARRE?

Basic Definition: A condition in which the immune system attacks the nerves.

- Immune System protects the body from harmful toxins, bacteria, viruses, fungi, etc.
- With Guillane-Barre, your body does the exact opposite and starts attacking your own nerves instead.
- Through a systematic review of case reports, we aimed to summarize the main features of patients with GBS and COVID-19.

HOW IS COVID-19 INVOLVED?

It is possible that GBS is linked to the COVID-19 infection, acording to new assesment cases reports. Essentially, it seems important to pay attention to the neruological effects of COVID-19. Everything has to do with the molecular level of the syndrome:
Many subtypes of GBS include:

- Epstein- Barr Virus
- Campylobacter Jejuni
- Cytomegalovirus
- Influenza A Virus

All of these were previously linked with subtypes of the coronavirus. More research needs to be done to find an accurate solution. GBS's pathophysiology and both clinical and electrophysiological characteristics remain to be further studied. The GBS onset appears to occur after the COVID-19 presentation by several days. Practitioners and investigators should have GBS in mind as they look after COVID-19 patients and conduct further research on novel aspects of COVID-19.

Comparison of GBS in the context of COVID-19 and Zika virus infections.

Characteristics	GBS and Zika virus	GBS and COVID-19
Temporal relationship	Zika symptoms paralleled GBS in 48% of cases [16].	In all but one case, COVID-19 symptoms preceded GBS by 5–24 days.
Possible mechanism	Other perinfection mechanisms may be present.	Possible post-inflammatory syndrome.
GBS phenotype	GBS variants with bilateral facial paralysis [15, 16].	GBS variants with bilateral facial paralysis.
CSF testing	In 10% of patients RT-PCR was positive in cerebrospinal fluid [16].	All cases had a negative RT-PCR in cerebrospinal fluid.
CSF protein levels	Median cerebrospinal	Cerebrospinal fluid protein level ranged

On average, 5-10 days after the COVID-19 infection, the neurological symptoms of GBS begin.

Polymerase Chain Reactions and Cerebrospinal Fluid Tests are needed to determine if the association between GBS and COVID-19 is related to viral neurotoxicity, autoimmunity, or both.

Discrepencies remain in this case study as researches previously related GBS to the Zika Virus. Connections between the two shed light onto new hypotheses.

References

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2.https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7509591/
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GUILLAANE-BARRE AND COVID-19

A CASE STUDY PRESENTED BY SHREYA SUNIL AND SUDIKSHA REDDY

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Thank You