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GBS PATIENT WITH ABNORMAL LIVER FUNCTION TEST POST IVIG THERAPY : RARE PRESENTATION

Neurology

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KEYWORDS

INTRODUCTION :

Gulliain barre syndrome is an acute, frequently severe and fulminant polyradiculopathy that is an auto-immune in nature. It occurs year round at a rate of between 1 and 4 cases per 100,000 annually; in the Unites states, app 5000-6000 cases per year. Males are at slightly higher risk for GBS than females and in western countries, adults are more frequently affected than children. [1]

Treatment available for GBS patients are plasmaphresis and immunoglobulins.

Intravenous immunoglobulin (IVIg) contains antibodies collected from donated blood. This therapy has also been shown to speed recovery from GBS when given in the first 2 weeks.

The side-effects of IVIG can be separated into adverse reactions due to the relative 'impurity' of the commercial preparations viruses, soluble substances or immunoglobulins other than IgG) and undesirable effects of their active component, the IgG. However, some of the mechanisms underlying these side effects are speculative and probably complex.

STUDY :-

20 years old male who is resident of Delhi presented in safdarjung hospital casualty with complaint of sudden onset of bilateral lower limb weakness which progress within one day ,patient was unable to sit from lying down position. without any sensory deficit and bladder bowel involvement.

Before the development of weakness patient had history of loose stools for 3 days, 2 to 3 episodes per day with history of mild fever.

No history of trauma , back pain.
Past history –history of seizure present 10 years back likely cause was NCC for which patient took AED for 3 years and symptom free now.
Neurological examination –
Higher mental function –normal
Meningeal sign –not present.
Cranial nerve examination- normal.
Motor function –
Nutrition –normal according to age of patient
Tone-decreased in both lower limb
Normal in upper limb
Power- at time of presentation-3/5 in both lower limb and in upper limb 5/5
After ivig treatment and
Physiotherapy
power in both lower limb 4/5
sensory examination – normal
reflexes – bilateral planter –mute
KJ-ABSENT both lower limb.
AJ-ABSENT

Investigations :

Hb-16.6 12.511.5
tlc -118001380012100
Plt -22500023800021400
b.urea -247049
creat -0.71.10.7
s.bil- 1.11.86.84.14.2
D-0.61.00.81.11.3
Sgot-52618277115
sgpt -6892121108116 hbsag-negative
ALP-7881666577 anti HCV-negative
LDH-308 DCT-negative
Retic count-1.5%

NCV- SNAP-normal, F waves-poor persistence in right median and right common peroneal nerve and not present in right tibial and right ulnar.

Fundus –normal study.

Treatment history –received injection IVIG -30gm per day for 5 days. After receiving injection IVIG for 5 days patient developed jaundice but without symptoms.

DISCUSSION:

Guillain-Barré syndrome (GBS) is a rare neurological disorder which causes progressive paralysis, starting from the feet and progressing up throughout the rest of the affected person's body (ascending paraplegia). It occurs when the body's immune system attacks the peripheral nerves in the body. This is known as an autoimmune disease and can be triggered following a surgical infection, or by a flu-like illness or stomach infection. As the immune system fights off the infection, it mistakenly attacks the peripheral nerves.[1]

In vast majority of GBS patients, treatment should be initiated as soon after diagnosis as possible. Either high dose intravenous immune-globulin IVIG or plasmaphresis can be initiated ,as they are equally effective for typical GBS.

Rare side effects of IVIG in patients are reported in which 2 cases of acute coombs positive hemolytic anemia developed during treatment with IVIG. The patients, a 30-year-old man and a 9-month-old child, were treated for ITP and Kawasaki disease, respectively [2,3]. Furthermore, decreased haptoglobin levels and mild reticulocytosis have been described in normal volunteers receiving IVIG, but without any change in haemoglobin level, suggesting that clinically insignificant, well-compensated haemolysis may occur during IVIG treatment [4].

Direct Coombs test is carried out in some centers as a safety check prior to red blood cell transfusions, may become positive temporarily. Hemolytic events not associated with positive DAT findings were observed in clinical trials.[5]

During the course of clinical program, ALT and AST elevations were noticed in some subjects.

In the CIDP study, 15/113 (13%) of subjects in the immune globulin intravenous group and 7/95 (7%) in the Placebo group (p=0.168) had a treatment emergent transient elevation of ALT. Elevations of ALT and AST were generally mild (<3 times upper limit of normal), transient, and were not associated with obvious symptoms of liver dysfunction. [5]

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