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Available online at: http://www.iajps.com *A Case Report*

CASE REPORT: GUILLIAN-BARRE SYNDROME

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Abstract:

Guillain-Barre syndrome, which is classically thought of as a rapidly progressive acute polyneuropathy, Guillain-Barré syndrome is a rare and serious autoimmune disorder of peripheral nerves.In GBS the nerves, protective covering (myelin sheath) is damaged. The cases of GBS in a very few numbers which occur by Campylobacterjejuni (a relatively common gastrointestinal bacterial pathogen). Rarely surgery or immunization can trigger Guillain-Barre syndrome. ***Conclusion:****It is a rare disease. The cases of GBS in a very few numbers which occur by Campylobacterjejuni (a relatively common gastrointestinal bacterial pathogen*

This case study explores Guillain-Barre syndrome, which is classically thought of as a rapidly progressive acute polyneuropathy, Guillain-Barré syndrome is a rare and serious autoimmune disorder of peripheral nerves. The initial symptoms are typically changing in sensation or pain along with muscle weakness, beginning in the feet and hands. In GBS the nerves, protective covering (myelin sheath) is damaged. The cases of GBS in a very few numbers which occur by Campylobacterjejuni (a relatively common gastrointestinal bacterial pathogen). While GBS is the most common cause of acute paralysis, the exact pathogenesis is still unclear. Mechanisms involve an autoimmune disorder, in autoimmune disorder body system mistakenly destroy the peripheral nerves and damages their myelin. Rarely surgery or immunization can trigger Guillain-Barre syndrome.

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INTRODUCTION:

This study comprises the gathering of data specifically to the patient's wellbeing condition. Guillain-Barré disorder is an uncommon and very serious autoimmune system issue of peripheral nerves. It is a fast beginning muscle shortcoming brought about by the safe framework harming the peripheral sensory system. The underlying side effects are commonly changing in sensation or torment alongside muscle shortcoming, starting in the hands and feet. This frequently spread to chest area and arms, with the two sides being included.[09] The side effects create over hours to half a month. Amid the intense stage, the turmoil can be dangerous, with creating shortcoming of the breathing muscles requiring mechanical ventilation. Component includes an immune system issue in which the body's framework erroneously assaults the fringe nerves and harms their myelin.[01,02,03]

Different subtypes of GBS are seen. Intense incendiary demyelinating polyradiculo neuropathy (the most widely recognized structure set apart by an adaptable strong shortcoming advancing sub intensely), Miller Fisher disorder, intense motor axonal neuropathy, and acute motor-sensory axonal neuropathy. Fulminant occasions of GBS have been represented in which a quick clinical disintegrating can mimic mind death. The general recurrence of Guillain Barre issue is extremely uncommon and seen in a not very many people groups, estimated to be 1 individual in 1000 every year. [02] All patients with Guillain-Barré disorder need to fastidious observing and supportive care. Early initiation of intravenous safe globulins or plasma trade is of demonstrated advantage and vital, particularly in patients with quickly progressive weakness. High portions of immunoglobulin can obstruct the harming antibodies that may add to Guillain-Barre syndrome. These medicines are similarly effective. Infrequently medical procedure or immunization can trigger Guillain-Barre disorder. In Guillain-Barre disorder, resistant framework which for the most part assaults just attacking invading organism starts attacking the nerves. In GBS the nerves defensive covering (myelin sheath) is damaged. The damage keeps nerves from transmitting signals to mind, causing shortcoming, numbness or loss of motion. At the point when myelin is devastated, destruction is joined by inflammation. These intense inflammatory sores are available inside a few days of the beginning of manifestations. Nerve conduction is slowed and might be blocked totally. While GBS is the most well-known reason for intense loss of motion, the precise pathogenesis is yet unclear. [01,07,10]

Undesirable autoimmunity does not arise in many people presented to a resistant boost because of Guillain-Barré disorder related contaminations, for example, C jejune. The cases of GBS in a very few numbers which occur by Campylobacterjejuni (a generally normal gastrointestinal bacterial pathogen). This issue normally shows up days or weeks after a respiratory or stomach related tract infection.

Patient presentation

A 32-year-old female, received in medical ward in public hospital Lahore on 16-02-2019, presented with a few days' history of progressive weakness of her lower limbs and for one morning has been unable to walk due to paralysis and complaint of shortness of breath. Her vital sign were Temp 37C, pulse rate 88/m, RR 22/m, BP 160/100mm/hg, and Sats 88%.

Before admission date, she had an episode of gastroenteritis with watery profuse diarrhea lasting some days. But last 4 (before admission date) days patient stool not passed, her presenting complain were dysphagia, paraplegia, SOB, she was slurring her words, unable to articulate properly. She started to complain dysesthesias of her upper limbs and fingers were showing weakness, both right and left sides were assessed, the power which seen 3/5 according to range of motion. Patient is clinically unstable, unable to walk and unable to stand by self, weakness is ascending and symmetrical. Affected lower limbs. During clinically observation patient proximal muscles were included, Trunk, and respiratory muscles can be influenced also. Respiratory muscle shortcoming with shortness of breath was present. Patient complains to paresthesias, numbness. Paresthesia's by and large start in the toes and fingertips, advancing upward yet for the most part not stretching out past the wrists or lower legs. Loss of vibration, proprioception, is present. During subjective data, she described her pain as serious and troubling because of the consequence of direct nerve. Urinary retention because of urinary sphincter unsettling influences was noted. Patient stool not passes from 6 days, Constipation due to gastric dysmotility and bowel paresis was present.

Patient come with Dyspnea and complaint to SOB (Shortness of breath), Respiratory examination was exceptional for poor inspiratory exertion or decreased breath sounds and for respiratory support nebulizer the patient in comfort position. Patient shifted to ICU on ventilator.

Involvement of cranial nerve is seen in patient. The cranial nerves III-VII and IX-XII are influenced. What's more, because of cranial nerve inclusion tolerant objection Facial hang (may imitate Bell paralysis), Diplopia's, Dysphagia, Ophthalmoplegia and Pupillary unsettling influences.

MRI and CT scan done to investigate GBS, all blood reports send and according neurologic examination and reports patient motor NCS reveals, both peroneal nerves show absent responses, both tibial nerves show delayed distal latencies, velocities with absent F-waves. Right ulnar and median nerves show delayed distal latency and both facial nerves show absent responses. In Sensory NCS right serval nerve shows normal response and right peroneal nerve shows absent response and absent motor responses in both peroneal and facial nerves, delayed distal latencies in both tibial and right ulnar motor nerves, Absent F-waves in all tested motor nerves, mildly reduced recruitment pattern is seen in TA and gastro sampled muscles. Association of facial, or pharyngeal, and visual muscles results in facial hang, dysphagia, and dysarthria. Reflexes are missing or decreased from the get-go in the illness course and hypotonia is also observed with significant weakness.

She diagnosed with Guillain- Barre syndrome. And according to NANDA some nursing diagnoses related to GBS include Insufficient breathing pattern, acute pain, disabled physical portability, nervousness or anxiety.

Patient is on conservative treatment that is Flagyl 500mg, Moxifloxacin 400mg, Solumedrol 1g, Dextrose saline 5% 1000ml, nebulization with Atrovent. Also, close monitoring of motor autonomic (blood pressure, heart rate and respiratory function, continuously observe breathing pattern. also nursing care provide include assess integrity of skin, skin color, skin moisture, texture of skin, and temperature of skin, keep up good skin care, keeping skin clean and lubricated with lotion as needed, turn q2h as indicated by an established turning plan, keep bed garments dry and free of wrinkles, pieces and give motor treatment or exchanging weight mattressas demonstrated.

DISCUSSION:

This study about a patient who was admit in government hospital with the diagnose of GBS, GBS condition is described by a immune mediated assault on myelin sheath or Schwann cells of tangible and engine nerves. This is because of cell and humoral safe mechanisms, every now and again activated by a antecedent infection. Most of individuals recoup totally or about totally. Anyway many have mild, lingering impacts, for example, irregular sensation or drop of foot for over two to three years. Industrious exhaustion and torment might be tricky. Fewer people approximately 10 to 15 percent have considerable longg haul handicap requiring of wheelchair. Passing from GBS is uncommon in nations with concentrated consideration offices, happening in less than 5 percent of patients. [12]

Most variations of GBS are treated likewise with IVIG (intravenous immune globulin) or PE (plasma exchange). The related condition, is likewise treated with Plasma exchange and intravenous immune globulin be that as it may, in contrast to GBS, it additionally reacts to corticosteroids.

GBS patient's complication, which include, cardiac arrest, paralysis of the muscles that control breathing, pulmonary embolism (lung clots), sepsis (blood infection). [04]

Intravenous immune globulin is an effective in Gullian berry syndrome disease. Immunotherapy treatment has not decreased the mortality in GBS. Both plasma trade and intravenous invulnerable globulin are effective immunotherapies. [09,11]

CONCLUSION:

This condition is characterized by an immune-mediated attack on myelin sheath or Schwann cells of sensory and motor nerves. Intravenous immune globulin is an effective in Gullian berry syndrome disease. Undesirable autoimmunity does not arise in many people presented to a resistant boost because of Guillain-Barré disorder related contaminations, for example, C jejune. Most variations of GBS are treated likewise with IVIG (intravenous immune globulin) or PE (plasma exchange). The related condition, is likewise treated with Plasma exchange and intravenous immune globulin nevertheless, in contrast to GBS, it additionally reacts to corticosteroids. In Guillain-Barre disorder, resistant framework which for the most part assaults just attacking invading organism starts attacking the nerves. The confusion typically shows up days or weeks after a respiratory or stomach related tract infection. Guillain-Barré disorder is an uncommon and very serious autoimmune system issue of peripheral nerves. All patients with Guillain-Barré disorder need to fastidious observing and supportive care. Amid the intense stage, the turmoil can be dangerous, with creating shortcoming of the breathing muscles

requiring mechanical ventilation. Patient was extubated following 14 days of ventilation and there was a gradual clinical improvement over 6 weeks. The patient received intense physiotherapy during this time and her symptoms continued to resolve and was able to walk again, although with minorresidual weakness remaining in lower limbs. She has good prognosis and is expected to make a full recovery within few months.

Additional file:

Abbreviations:

GBS**(**Guillain-Barre syndrome), SOB(Shortness of breath), IVIG (intravenous immune globulin), PE (plasma exchange).

Availability of data and materials:

The datasets used and/or analyzed during the current study are available from the corresponding author upon reasonable request.

Author's contributions:

Noreen Shahbaz and Ms. Hajira sarwar contributed equally to this work.

Ethics approval and consent to participate:

The patient relatives had already agreed and signed the consent form.

Competing interests:

The authors declare that they have no competing interests.

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