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A Case Report on Sepsis with Multiple Organ Disfunction Syndrome

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ABSTRACT:

Introduction: The term "sepsis" refers to a medical condition which confounds extreme contamination & is portrayed by fundamental aggravation & broad injury to the tissue. There is a severity spectrum ranging from sepsis to septic shock and MODS. In most cases, the clinical cycle begins with disease. This conceivably prompts sepsis and organ brokenness. The various organ brokenness conditions (MODS) is the recognized disappointment of basic organ work in patients that have supported SIRS. Since SIRS and MODS are ramifications of the over the top enactments of aggravation, broad examination and various clinical preliminaries have sought after medicines that would alter the incendiary reaction.

Patient History: A 69 year old female was admitted in HDU Acharya Vinoba Bhave hospital on dated 4 July 2021 with chief complaint of distension of abdomen, breathless since 2 days and also loss of appetite since 8 days. No history of fever, cough, cold, chest pain.

The Main Diagnosis, Therapeutic Intervention, And Outcome: After physical examination and investigation doctor diagnosed this case of sepsis with multiple organs dysfunction syndrome. Patient was treated with Bipap SOS, non-steroid anti-inflammatory, analgesic drugs, antibiotics, antacid drug. Also provide protein supplements, Her General condition was moderate.

Nursing Management: Bipap SOS ,Administered IV fluid, RT feeding 2 hourly, monitor vital sign 1 hourly , changing the position two hourly. Administered medication doctor's order

Conclusion: Timely treatment and management of Sepsis can be useful to control the further morbidity.

Keywords: Sepsis, Multi-Organ Dysfunction Syndrome (MODS),

INTRODUCTION:

Sepsis is estimated to affect 18 million people worldwide each year and to kill 1400 people every day. As indicated by an epidemiological examination, sepsis influences around 700,000 individuals every year in the United States alone, with a general death pace of 30%, or over half in patients with septic shock or potentially numerous framework organ disappointment.[1] Sepsis is a clinical condition conjured by contamination with a significant and conceivably hindering effect on broad, local and miniature vascular hemodynamic, metabolic/endocrine/resistant fiery homeostasis, and cell and tissue work. Five centuries prior, an eminent Italian logician and lawmaker characterized sepsis as "a state of furious fever that in the first place is not difficult to fix yet hard to identify, yet throughout time, not having been recognized or treated at the outset, turns out to be not difficult to distinguish however hard to fix" multi-organ dysfunction syndrome is a basic condition with high grimness and mortality and its event considerably builds ICU responsibility and cost.[2] Numerous organ brokenness

conditions (MODS) characterize at least two organ disappointments as a result of foundational fiery reaction , contaminations and sepsis are the most widely recognized purposes behind MODS. Various organ brokenness disorder (MODS) is a fundamental, useless fiery reaction that requires long emergency unit stay. It is portrayed with high death rate contingent upon the quantity of organs involved. It has been perceived that organ disappointment doesn't happen as an all-or-none principle, but instead a scope of organ brokenness exists bringing about clinical organ disappointment.[3] Various organ brokenness condition (MODS) is an intricacy of extreme sepsis and septic shock and a main source of death in the careful serious consideration Intensive care unit. The guess in multi-organ dysfunction syndrome is deteriorated by old age and prior genuine ailment. Since the occurrence of sepsis is ascending in corresponding to the maturing of social orders, an expansion in the quantity of older septic patients with comorbidities, starting at a more serious danger for multi-organ dysfunction syndrome, may be normal. Early determination and viable treatment are critical for forestalling multi-organ dysfunction syndrome and enduring sepsis; both, nonetheless, are impeded by extraordinary heterogeneity of the condition.[4]

PATIENT INFORMATION

Patient specific information:

A 69 year old female was admitted in HDU Acharya Vinoba Bhave hospital on dated 4 July 2021 with chief complaint of distension of abdomen, breathless since 2 days and also loss of appetite since 8 days. No history of fever, cough, cold, chest pain. As narrated by patient's relative and report of CT scan patient had history of CVE 3 month back. And she is known case of diabetes mellitus type II since 15 year she took the treatment regularly. After physical examination and investigation doctor diagnosed this case of sepsis with multiple organs dysfunction syndrome.

Primary concern and symptoms of the patient:

Present case was brought to casualty by relative (son) with complain of abdominal distension, breathless since and also loss of appetite since 8 days. No history of fever, cough, cold, chest pain.

Medical family and psychosocial history:

Patient had history of CVE 3 month back (Left side) and also Present case had a history of diabetes mellitus II since 15 years. she belongs to nuclear family her family members not having any type of medical illness , like diabetes mellitus. She was mentally stable semiconscious and not oriented to date and time but oriented about place. She had maintained good relationship with doctor and nurses.

Relevant past intervention with outcome:

Present case had history of diabetes mellitus type II since 15 year she took the treatment regularly.

Clinical findings: The patient was semiconscious and not oriented to date and time but oriented about place. Her body built was moderate and she had maintained good personal hygiene. Her blood sugar level was high that is 350 mg/dl. Pulse rate was slightly increased. Patient having a breathlessness that is her respiratory rate is low; she had a fever that is temperature 38.5°C and having blood pressure was slightly increased that is 140/90mm/hg also abdominal distention is present. Abdominal shape was cylindrical, abdominal girth was 94 cm and fundal height was 22 cm.

DIAGNOSTIC ASSESSMENT

On the basis of patient history, physical examination and other investigation such as …

HRCT Thorax – Multifocal areas ground glass opacities with centrilobular nodules in apico posterior segment and anterior segment , left upper lobe and superior segment of left lower lobe, suggestive of bronchia pulmonary alveolitis .
Bilateral moderate plural effusion right > left with collapse consolidation of right and lower lobe and basal lungs atelectasis in left lower lobe.
USG :
IMPRESSION: Gallbladder sludge
Bilateral plural effusion
Grade 1 fatty liver
ECG Changes- ACSA unstable angina NSTEMI
OTHER FINDINGS:
HB Level: Decreased

THERAPEUTIC INTERVENTION

Present case took the medical management with non-steroid anti-inflammatory drug tablet Ecospirn 75mg one time in a day , tablet Atorvas 40mg for liquid lowering if needed, tablet Olenzepine 2.5mg twice a day, syrup Duphalac 30 ml if needed, injection meropenem 500mg thrice a day, injection linezolid 600mg lV two times a day, injection pantoprazole 40mg one time in a day, tablet Dolo 650 mg in emergency, protein powder 2 tab. Thrice a day, injection Telcoplamin 200 mg one time in a day, no changes were made in therapeutic intervention.

Nursing perspectives: Bipap SOS**,** IV fluid was provided to maintain fluid and electrolyte. Monitor vital sign per hourly. Provide artificial, changing the position two hourly.

DISCUSSION:

A 69 year old female was admitted in Acharya Vinoba Bhave hospital with chief complaint of distension of abdomen, breathless and also loss of appetite since 8 days, No history of fever, cough, and cold. After physical examination and investigation doctor diagnosed this case of sepsis with multiple organs dysfunction syndrome. Patient took a medication regularly and his outcome was moderate the further treatment is Carry on in Acharya Vinoba Bhave hospital. Review study by associated with septic circulatory injury upsets tissue oxygenation, modifies metabolic guideline of tissue oxygen conveyance and adds to organs brokenness miniature vascular and endothelial anomalies add to the septic microcirculatory deformity in sepsis.
Comparable investigation on Multicenter investigation of the different organ brokenness condition in escalated care units, The outcome was The in-medical clinic death rate in patients with MODS was 44.6%, and some sort of constraint of life support was applied in 70.6% of the patients who passed on. The prescient model boosting explicitness incorporated the accompanying factors: greatest SOFA score, least SOFA score, pattern of the SOFA for 5 back to back days, and age more than 60 years. The model demonstrative yield was: explicitness 100%, affectability 7.2%, positive prescient worth 100%, and negative prescient worth 57.3%; the region under the beneficiary working trademark bend was 0.807.[5] Studies related to septicemia[6-10] were reviewed.

Conclusion:

Timely treatment and management of Sepsis can be useful to control the further morbidity in patients with multiple organ failure.

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