Case study

Case Report on Ebsteins Anomaly

Abstract:

Introduction:Ebstein's anomaly, also known as Ebstein's malformation, is a congenital (existing at birth) heart defect that affects a small percentage of people. The tricuspid valve (the valve that connects the chambers on the right side of the heart) does not close properly in people with Ebstein's abnormality[1]. **Patient history:** The female patient who is 25-years was admitted in Acharya VinobaBhave Rural Hospital on date 01/04/21 in medicine ward. She was admitted with the complaint of breathlessness on exertion, and weakness since 2 months. patient is a known case of severe ASD since birth. After coming to the ward all investigations done like blood test, ECG, 2D Echo, chest x-ray etc. then final diagnosis is conformed as severe ASD with Ebsteins anomaly. **Past history:** Patient is a known case of ASD. And not having any other history of communicable disease, asthma, tuberculosis. **Pharmacology Management:** Tablet- Lasilactone (20/60)), Tablet- Neurobion Fort, Tablet- Pan 40mg. **Nursing management:** vital sign checke , comfortable position given as patient having breathing difficulty. Fowlers position given. intake and output recorded. provided. Assessed the patient for anxiety, depression. **Conclusion:** Patient was admitted to the hospital with the major complaints of trouble breathing and generalised weakness, and her situation was critical. Immediate treatment was initiated by a member of the health team, and all available treatments were administered, and the patient's condition has improved.**Key Words:**Ebsteins Anomaly, Pharmacology, Nursing management.

Introduction:

Ebstein anomaly is an uncommon birth abnormality that affects the heart (congenital). The flaps (leaflets) of your tricuspid valve are deformed and in the wrong place with this disorder. As a result, the valve is dysfunctional [2].

Blood may flow back through the valve, reducing the efficiency of your heart's work. The Ebstein abnormality can potentially cause cardiac hypertrophy and heart failure [2].

Incidence:

Ebstein abnormality is thought to account for 0.5 percent of congenital heart disease cases. Because mild versions are commonly untreated, the true prevalence is unknown. More cases are being diagnosed as a result of the widespread use of echocardiography [3].

Objective

1. To get general idea about disease condition.

2. To explore knowledge regarding nursing management, pharmacology, and medical management.

Patient Information

Patient present history: The 25-year female patient was admitted in AVBRH on date 01/04/21 in Medicine Ward and having chief complaints of breathlessness, chest pain, and weakness since 2 months. afterwards all the possible investigation like blood test, ECG, 2D ECHO, X-ray etc done. And final diagnosis is conformed as Ebsteins Anomaly **Past history:** Patient is a known case of ASD Since birth and not having any other history of communicable disease, asthma, tuberculosis etc.

Causes:

The tricuspid valve lies lower than normal in the right ventricle in Ebstein abnormality. As a result, a portion of the right ventricle is becoming part of the right atrium, causing the right atrium to expand and malfunction[5].

The leaflets of the tricuspid valve are also improperly shaped. Blood can seep backward into the right atrium as a result of this (tricuspid valve regurgitation)[5].

The valve's placement and how well it's created differ from person to person. Some people have a valve that is slightly odd. Others have a significantly leaking valve[6].

Clinical Finding:

patient unable to perform daily living activities because of weakness, and feeling breathlessness on exertion. And mild chest pain during heavy work.

Diagnosis evaluation.

1. History collection-Done.

2. Physical examination- Done

3. Others: ECG, CBC, 2D ECHO, chest x-ray done

Table 1: Blood Investigation Report

Investigation	Patient Value	Normal Value	Justification
Complete blood count			
1. HB%	11.7%	13-15.5%	Decreased
2. MCV	83.9cub.micron	80-90cub.micron	Normal
3. MCH	28.8 Pico gm.	26.5-33.5 Pico gm.	Normal
4. Total RBC Count	4.05 million/cu.mm	4.4-6.1 million/cu.mm	Normal
5. Total WBC Count	10400 cu.mm	4000-11000 cu.mm	Normal
6. Total platelet count	2.07 lacs/cu.mm	1.4-4 lacs/cu.mm	Normal
7. Monocytes	03 %	4-10%	Normal
ESR	98		Normal

RTPCR- NEGATIVE

2D-ECO – severe Ebstein seen

Medical Therapy

Pharmacology therapy

- Treatment of underling condition [7]
- Diuretics – to prevent hyperkalaemia and help to control BP[7]
- Vit B supplement medicine[7]
- Antacid[7]

Medical Management: Now patient treatment in the ward is Tablet- Lasilactone 20/50mg , Tablet- Pan 40mg, Tab. Neurobian fort **Nutritional Therapy –** patient have to takehigh protein , calcium supplement like dairy products and leafy vegetables, and need to add phosphorus like nuts, meats, beans and milk in the diet. Another important nutrient is iron because irons helps the body use oxygen and grow properly.Vitamin B complex to be taken for more energy which is found in whole grains, fresh vegetables[6,7].

Nursing Management

The nurse is in charge of prescribing the medication and assessing their positive and detrimental effects on the patients. The pharmacologic therapy type and dosage is determined by the combination of these effects. Actions to assess clinical effectiveness in nursing include:

Observe patient for breathing difficulty and weakness.

Keep intake and output records to determine negative equilibrium.

Nursing diagnosis

- Breathing difficulty related to ASD
- Activity intolerance related to generalized weakness as evidence by lack of energy.
- sleeping pattern disturbed related to hospitalization and treatment regimen as evidenced by patient own verbalization.
- Imbalance nutrition less than body requirement related to anorexia as evidence by weakness.

COLLABORATIVE PROBLEMS/ POTENTIAL COMPLICATION

- heart failure (right side)
- Arrhythmias
- Stroke
- Short life span.

Continuing Care: A referral to the home care may be suggested for a hospitalized patient depending on physical condition of the patient and the availability of family assistance. The patients with Ebsteins Anomaly had low physical stamina and breathing problems has need to come for regular follow ups.

Discussion

The cardiac abnormalities, such as pulmonary valve stenosis or atresia, atrial septal defect, or ventricular septal defect, might cause Ebstein anomaly. Furthermore, many patients with Ebstein anomaly have an auxiliary (additional) electrical conduction route in the heart, which can contribute to supraventricular tachycardia (abnormally high heart rate)[8]. A study conducted in 1971 reported that at 13 years of age only 50 percent of clients survived. As well as, the patients with milder forms have a more typical life expectancy[9].

Strength: Patient was 25year female tolerate all the medication and well response around 15 days to the therapeutic treatment of the hospital which was given as a treatment.

Informed Consent

Before taking this case, information was given to the patients and relatives and informed consent was obtained from patient as well as relative.

Conclusion:

the tricuspid valve flaps are improperly formed in Ebstein's anomaly, excessively big, or attached to the heart wall, preventing them from moving[9]. Two of the valve flaps are frequently seen down in the ventricle, where they don't belong. The valve unable open and close properly as a result of these anomalies, and blood might go backwards into the atrium[10]. All Ebstein sufferers must be followed by congenital heart specialists for the rest of their lives. Many Ebstein patients will require rhythm treatment, which may include ablation treatments. Such rhythm abnormalities frequently return, and new rhythm disorders may arise, necessitating continued monitoring[11].

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