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Case Study on 25-Year-Oldmale Patient with Pemphighus Vulgaris

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CASE PRESENTATION:

HISTORY OF PRESENT ILLNESS:

A 25-year-old male patient came to hospital with IPNO. 55298 in dermatology department and with chief complaints of multiple raised nodular lesions at axilla and perianal region in the past one month with exudative discharge. Patient is having previous history of this dermatological infection which is previously diagnosed as pemphigus vulgaris and on medication with tab prednisolone 25mg dose per oral/once daily. History of present illness after admitted in the hospital patient complaints that he is suffering from headache and rise in body temperature and similar complaints that are in past are positive. Patient is a known case of seizure history and on medication tab phenytoin 200mg per oral/once daily. Patient is having normal stable vitals. On general examination patient is with reddish bumps and raised body lesions. On physical examination patient conscious, coherent and cooperative. Patient was diagnosed with of pemphigus vulgaris one year ago and since then he is using medication related to the itching and lesions and again reoccurrence of skin infection happened for past one month with exudative discharge of lesions, skin irritation and rashes.

SOCIAL HISTORY:

Patient is occasional alcoholic for past 2 years and cigarette smoking 1 pack daily for past 1 year.

ALLERGIES:

No known food, medicine and environmental allergies.

PAST MEDICAL HISTORY:

Patient is a known case of pemphigus vulgaris in past 1 year ago and on medication tablet prednisolone 25mg per oral/once daily.

Patient is a known case of seizure activity of 2 episodes and on medication tablet phenytoin 200mg per oral/once daily.

SURGICAL HISTORY:

No history of any past surgeries.

MEDICATIONS HISTORY:

After admission in the hospital no other medications were used but previously for pemphigus vulgaris and seizure activity medications were used.

FAMILY HISTORY:

No significant family history.

PHYSICAL EXAMINATION:

VITALS: Temperature- afebrile, Blood pressure-110/70mmHg, Heart rate-80/min, Respiratory system – bilateral air entry positive, GRBS- 96mg/dl, SPO2- 98%room air.

GENERAL EXAMINATION:

On general examination patient is with reddish bumps and raised lesions.

PHYSICAL EXAMINATION:

On examination patient is conscious, coherent and cooperative.

RESPIRATORY FUNCTION:

He has normal respiratory rate that is 22/min.

CARDIOVASCULAR:

He has heart rate which is regular with rhythm and there were no murmurs, wheezing sounds.

GASTROINTESTINAL:

He has per abdominal region soft and no extra growths and abnormalities were found.

Bowel and bladder was normal and appetite was normal.

INITIAL EVALUATION:

LABORATORY STUDIES:

COMLETE BLOOD PICTURE:

Haemoglobin- 10gm%

Red blood cells- 2.5mill/cumm

White blood cells- 7000cells

LIVER FUNCTION TESTS:

Serum creatinine: 0.6mg/dl

Urea- 28mg/dl

RENAL FUNCTION TESTS:

Sgot – 25u/l

Sgpt – 32u/l

USG ABDOMEN PELVIS:

palpable masses and uterine fibroids and scars anomalies found near pelvis region.

VIRAL MARKERS: Negative.

SERUM ELECTROLYTES:

NA- 138MMOL/L

K+- 3.8MMOL/L

CA – 10.3MMOL/L

DIFFERENTIAL DIAGNOSIS:

- Pemphigus
- Bullous pemphigoid
- Linear IgA bullous dermatosis
- Bullous erythema multiforme
- Dermatitis herpetiformis
- Bullous impetigo
- Seborrheic dermatitis
- Rosacea
- Eczema
- Herpes simplex stomatitis
- Major aphthous ulcers
- Oral lesions of steven Johnson syndrome

CONFIRMATORY LABORATORY EVALUATION:

Main diagnosis is made through the physical and general examination and then USG abdomen pelvis shows that palpable mases and uterine fibroids and scars anomalies found near pelvis region.

DIAGNOSIS:

Based on the signs and symptoms and laboratory findings a diagnosis of **PHEMPHIGUS VULGARIS** was made.

MANAGEMENT:

PEMPHIGUS VULGARIS {PV} is a skin infection which is caused own body immune cells also known as autoimmune, mucocutaneous, vesiculobullous disease. Pemphigus is Greek word which means blisters that forms on skin. It is a rare disease which occurs fewer common people mainly presents in oral mucosa and lesions which will form brakeage of skin and ulcers.

Pemphigus vulgaris is not curable but we can control with therapy which includes generally treatment can decreases the blisters and sores of all types of pemphigus. These pemphigus therapy can also prevent from its further complications. A therapy plan for pemphigus may involve one or more of the following:

- Corticosteroids: larger population will use corticosteroid therapy which includes prednisolone and methylprednisolone. Since 1950`s corticosteroid therapy is the standard treatment of PV. Corticosteroids therapy includes systemic corticosteroids like prednisolone and methyl prednisolone medication are used. Topical steroids were also used in many patients combination adjuvant drugs were also used in most cases azathioprine, methotrexate, cyclophosphamide, dapsone, cyclosporine, mycophenolate, gold, levamisole. Adjuvant therapy generally given one at a time. Therefore they will be changed if there is less response noted. Prednisone and prednisolone are used most commonly with starting doses of raised from 15 -180 mg. highest dose of prednisone is 400mg which should not be exceeded for a day.
- Pemphigus vulgaris symptoms ranged from 7 months to 6 years before using corticosteroid therapy. After using corticosteroids, the symptoms last for about 5 - 15 weeks.
- Mycophenolate drug was approved by FDA in 1995 which is an immunosuppressant drug. Mycophenolate is absorbed fastly and then converts into active metabolite called mycophenolic acid. This drug will reject the organ transplantation and therefore acts as adjuvant therapy to corticosteroids in PV. After using this drug duration of clinical improvement was noted in 2-24 weeks.
- Methotrexate drug was permitted by approved by FDA for psoriasis in 1971 and for rheumatoid arthritis in 1988, whereas in PV it is used as adjuvant therapy in corticosteroids. Methotrexate stops the metabolism of folic acid and used as immunosuppressive agent where as folic acid is more important for normal cell development and multiplication. Therefore, methotrexate has more efficacy against malignant cell development and has anti inflammatory properties. Duration of PV before treatment was 11 months -7years. But now clinical improvement was noted between 1 – 30 weeks.

DISCUSSION:

EPIDEMIOLOGY AND PATHOPHYSIOLOGY:

After running many studies and retrospective studies, pemphigus vulgaris is developed among 1,00,000 population and mainly developed in female compared to male due to certain ethnic groups and generally seen in between 50-60 years of age.

Clinical features mainly include lesions over oral cavity, oral ulcerative, painful erosions in gingiva, buccal, larynx, oesophagus, scalp, face, chest, axillae and umbilicus. Genetic factors will have many types of antibodies are having dominant cadherins, DSG1 and DSG3, HSPCA1, thyroid peroxidase, muscarinic and nicotinic acetylcholine receptors and mitochondrial antigens.

The population who are having genetic predisposition for developing pemphigus vulgaris having major histocompatibility complex and class II molecules such as DR4 and DRw6 are mostly effected.

DIAGNOSIS:

PV diagnosis is done mainly through physical examination and these blisters will be examined through histopathological examination will relieve basal dermal/epidermal basement membrane shows like row of tomb stones. Elisa is used most importantly to diagnose the exact pv measures anti-DSG1 and anti-DSG3 igG.

PROGNOSIS:

If patient isnot treated completely patient will face improvement in genetically inherited complications. Then patient will have a lot of symptoms like blisters, lesions, rashes, skin infections, itching, ulcers and breakage of skin. Here this patient is treated with corticosteroid therapy which includes tab. pregnisolone-25mg/po/od.

ENHANCING HEALTHCARE TEAM OUTCOMES:

The main point in this is that how the healthcare team works in order to bring a proper outcome with the diagnosis. Here the staff works accordingly coordinate with each other to achieve proper diagnosis in order to give proper treatment for concerned diagnosis. The staff who is mainly involved are doctors, duty medical officers, nursing staff, technicians these all play major role in the probability of making correct diagnosis for the patient. There should be communication between them if there is no communication it leads to improper diagnosis. Any alterations in the middle of making diagnosis the discussion should be made and changes are to be done. Communication here plays a vital role.

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