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FALLING FROM FRYING PAN INTO FIRE-THE COMPLEXITIES IN INTERNAL MEDICINE

General Medicine

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ABSTRACT

The branch of Internal Medicine is known for the sheer multiple complexities in cases. We hereby describe a case where an elderly patient was already battling multiple (significant and serious) comorbidities and was diagnosed with another one. Management of one issue raised grievances with others. This is, In fact, a recurrent theme in Internal Medicine, which is why this case is being presented.

KEYWORDS

Multiple coexisting co morbidities, Treatment of one causing problems in others, Life threatening diseases, challenges faced in management.

INTRODUCTION:-

An 81 year male patient presented to us with low platelets. He was already a known case of (1) Type2 DM (2) Hypertension (3) Benign enlargement of prostate (4) Ischemic heart disease—PTCA done in past (5) Recent onset hyponatremia ascribed to (6) Hypoadrenalism- On maintenance doses of oral steroids (7) Chronic renal insufficiency (8) On Psychiatric medications (9) Lumbago (10) Obstructive airways disease (10) Urinary calculus and (11) UTI.

He was asymptomatic and was found to have very low platelet count on routine evaluation.

On examination:-

Patient was conscious, oriented to time place and person, BP-140/80 mm, PR-84 bpm, SPO2-98%on room air. No pallor, icterus, cyanosis and clubbing. RS: - air entry bilateral equal, no added sounds, PA- soft, non-tender, no palpable organs. CVS-S1, S2 heard, no significant murmur. There was no clinical bleeding on history or clinical evaluation.

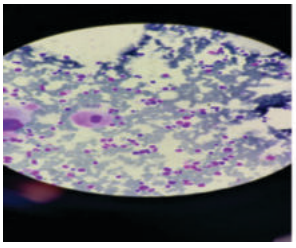
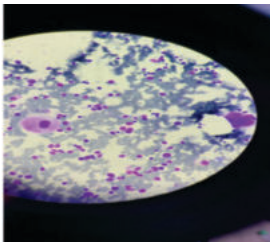
Blood report: -

21/8/2022-Hemoglobin-10.2,WBCs-6580,Platelets-4,02,000
10/9/2022-Hemoglobin-11.2,WBCs-5100,Platelets-1,32,000
3/10/2022-hemoglobin-10.1,WBCs-5700,Platelet-1,78,000
10/10/2022 morning sample- hemoglobin-12.0, wbcs-6900, platelet-50,000

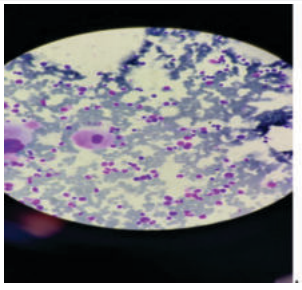
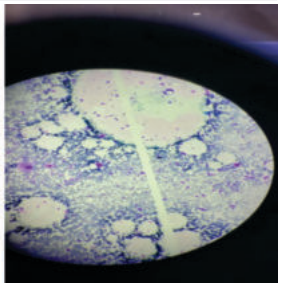
Evening sample- hemoglobin-10.2, wbcs-6900, and platelets-13,000. Dengue ns1-negative, MAT-negative, serum iron-221, iron binding capacity-221, total iron binding capacity-268. PT/APTT-Normal range. Hematologist's opinion was sought. Bone Marrow aspiration biopsy was done and findings were as follows.

Normocelluar marrow for the age of the patient (cellularity of 20-25%) with trillineage hematopoiesis. The myeloid erythroid ratio was largely maintained. The erythroid series showed micronormoblastic maturation. The myeloid series showed sequential maturation. Megakaryocyte were increased in number. No atypical cell were found. Above finding of BMA were consistent with ITP.

Bone marrow slides :

On High Resolution Microscope:-

On Low Resolution Microscope:-

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USG Abdomen:

Both kidneys denoted renal parenchymal disease. There was bilateral perinephric fat stranding. Median lobe hypertrophy of prostate with significant PVR. Bladder wall thickened and trabeculated with mucosal irregularity and multiple fine internal echoes and echogenic sludge.

Because of above findings, urine examination (for routine and microscopy) was done, which showed sugar-3+, ketone-negative, RBC-4-6/hpf, pus cell-8-10/hpf, bacteria-3+, leukocytes esterase-3+. Urine for culture sensitivity sent suggestive of Citrobacter koseri with colony count>10, 0000, sensitive to cefaparazone/subactam. We started him on this IV antibiotic.

Treatment:

Treatment goals are minimizing platelet destruction. If immunosuppression doesn't work, splenectomy has to be considered.

Accordingly, One SDP was transfused. Immunoglobulins were administered (10 vials of 5 gms each over 4 days, each over 3-4 hours)[8]. Post this, Platelets rose from 13,000 to 43,000 and then 74,000. He was continued on oral steroids at an augmented dose. Maintaining his sugars with all these agents was quite a challenge, especially with his mental condition, stay in ICCU and erratic food intake, all of which contributed to wide fluctuations in his sugars.

Repeat Blood test done- hemoglobin-9.7, wbcs-9.33, platelets-1,61,000, serum creatinine-1.98, sodium-137, potassium-5.0, sgot-8, and sgpt-10 Patient was started on physiotherapy and mobilization with a close watch on bleeding sites. He responded well to given medical treatment, was hemodynamically stable and hence discharged. Unfortunately his platelets dropped in next 2 weeks and he had to be administered Romiplostim 250 mcg SC once a week.[10]

DISCUSSION:

Idiopathic thrombocytopenic purpura (ITP) is characterized by a low platelet count and is seen more in females than males (3:1). Low production and increased destruction both play a role but the latter pathology is more active. Autoantibodies against platelet

glycoproteins and cellular mechanisms of immune modulation both have been implicated[1]. Autoantibody (7S IgG) causes phagocytic destruction of platelets. The resultant thrombocytopenia, if significant, induces purpura and hemorrhage[2]. Petechial lesions, nosebleeds and bleeding gums[3] may occur if the platelet count is below 20,000. If lower, there may be spontaneous pulmonary/ CNS bleeds[4,5,7] with grave consequences, especially in elderly.

We were a bit worried because ITP in a male patient older than 60 years, though not impossible, is a bit unusual. Other conditions like myelodysplastic syndromes, acute leukemia, and marrow infiltration (myelophthisis) needed to be ruled out[6]. Unfortunately, there's no permanent cure. Relapses may occur even years after an initial successful therapy.[9]

CONCLUSION:

This case is being published to highlight the intricacies and inherent complexities faced by an Internal medicine specialist. Treatment of ITP makes sugar and BP management a headache, especially when heart and kidneys are already compromised. His dose adjustments from point of view of age, psychiatric issues and CRF itself was a challenge. Continuation of anti-platelets (past h/o angioplasty) in face of ITP was daunting, as was recurrent swings in sugars and BP because of steroids for hypoadrenalism. Loss of fever following depressed immunity (age/DM/ steroids) mandated that we had to be doubly cautious about sepsis. Hyponatremia needed to be sharply delineated from clinical manifestations of psychiatric illness.

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