

ABSTRAK

Plasma Cell Disorders dengan Sindrom Hiperviskositas

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Plasma Cell Disorders adalah sekelompok penyakit yang diakibatkan oleh derivat sel limfosit B. Monoclonal gammopathy undetermined significance (MGUS), multiple myeloma (MM), Waldenstrom's macroglobulinemia (WM), primary amyloidosis, dan heavy chain disease (HCD) semua termasuk kelompok gangguan ini.

Sindrom hiperviskositas merupakan kombinasi dari tanda – tanda dan gejala klinis yang terkait dengan peningkatan viskositas darah. Gejala klasik pada sindrom hiperviskositas ada tiga yaitu, kelainan neurologis, perubahan penglihatan, dan perdarahan mukosa.

Dilaporkan kasus laki – laki berusia 55 tahun dengan keluhan lemas, pandangan kabur, pusing, pendengaran menurun, pendarahan pada gigi, dan buang air besar bercampur darah sejak 1 tahun yang lalu. Pemeriksaan fisik adanya konjungtiva anemis, paru dan jantung dalam batas normal, dan tanda vital dalam batas normal. Pemeriksaan darah didapatkan hemoglobin 6.9 g/dL, trombosit $115 \cdot 10^3/\text{ul}$, eritrosit 2.00 jt/ul, hematokrit 19.5 % anemia trombositopenia, protein 13.5 g/dL hiperproteinemia, albumin 2.9 g/dL hipoalbuminemia, globulin 10.6 g/dL hiperglobulinemia, dan kalium 5.80 mg/dL hipokalemia. Pemeriksaan darah tepi ditemukan sel darah merah membentuk formasi rouleux, clumping/aglutinasi eritrosit, dan sel plasmasitoid. Pada pemeriksaan BMP didapatkan hasil sel plasma sekitar 12 %. Pemeriksaan SPE sulit dilakukan karena darah sangat pekat dan serum tidak bisa didapatkan. Pemeriksaan elektrolit didapatkan hasil hipokalemia, hiponatremia, dan hipokalsemia, dengan catatan khusus berkenaan dengan validitasnya. Pasien di diagnosis plasma cell disorders dengan sindrom hiperviskositas.

Kata kunci: Plasma Cell Disorders, Sindrom Hiperviskositas

Introduction

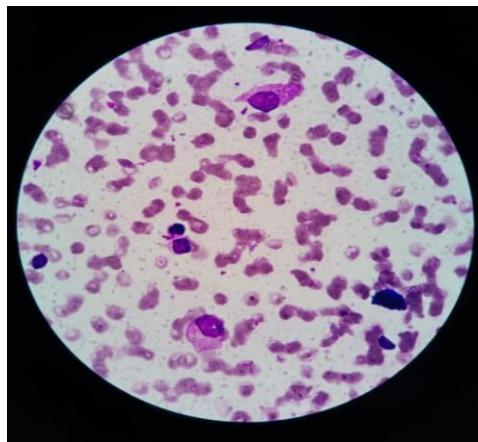
Plasma cell disorders are a group of related diseases arising from a common progenitor belonging to the B-cell lineage. They are characterized by the expansion of plasma cells in the bone marrow (BM) and nearly always accompanied by the presence of a monoclonal immunoglobulin (Ig) or Ig fragment in the serum and/or urine of patients. In this case, the patient examination of electrolytes results from hypokalemia, hyponatremia and hypocalcemia, with special note regarding its validity, make this case interesting.

Case Presentation

Our patients, a men 55 year old complaints of weakness, fleeing vision, pushing, decreased hearing, bleeding in the teeth, and defecating mixed with blood since 1 year ago. Physical examination of the presence of anemic conjunctivae, lungs and heart within normal limits, and vital signs within normal limits. Blood tests received hemoglobin 6.9 g /dL, platelet 115 10^3 /ul, erythrocytes 2.00 jt/ul, hematocrit 19.5% anemia thrombocytopenia, protein 13.5 g/dL hyperproteinemia, albumin 2.9 g/dL hypoalbuminemia, hyperglobulinemia, 10.6 g/dL globulin, and 5.80 mg/dL hypokalemia occasionally. Blood examination found red blood cells to make rouleaux formation, clotting / agglutination of erythrocytes, and plasmacytoid cells. On examination of BMP the plasma cell yield is around 12%. SPE examination is difficult because blood is very concentrated and serum cannot be obtained. Examination of electrolytes results from hypokalemia, hyponatremia and hypocalcemia, with special note regarding its validity. Patients were diagnosed with plasma cell abnormalities with hyperviscosity syndrome.



Picture 1. firm round lucency in the left frontal os, suspicious of lytic lesions



Picture 2. Blood examination found red blood cells to make rouleux formation, clotting / agglutination of erythrocytes, and plasmacytoid cells

Discussion

Plasma cell disorders are a heterogeneous group of blood disorders characterized by the detection of a monoclonal paraprotein in the serum or urine and/or the presence of monoclonal plasma cells in the bone marrow space or, rarely, in other tissues. Monoclonal gammopathy of undetermined significance (MGUS), multiple myeloma (MM), Waldenstrom's macroglobulinemia (WM), primary amyloidosis, and heavy chain diseases (HCD) all belong to this group of disorders.

Hyperviscosity syndrome is a combination of clinical signs and symptoms associated with increased blood viscosity. The classic triad of symptoms includes neurologic abnormalities, vision changes, and mucosal bleeding.

References :

1. Jorge J. Castillo. Plasma Cell Disorders. 2016; 677–91