Retropertoneal tumors, benign or malignant derive from a variety of tissues, so their classification is primarily based on this histological parameter (tissue origin). Retropertoneal tumors, although very rare, raise interests by the specific characteristics from the space where they develop, causing serious problems for diagnosis and treatment. Autoimmune Hemolytic Anemia is a common complication of malignancy, but may be secondary to the retropertoneal tumors. We present the case of a woman, 42 years old, who is admitted in the Hematology Clinic for abdominal pain and marked asthenia. The abdominal CT objectified presence of expansive tumor on the caudate lobe liver, well defined, with mass effect on portal trunk. She is transferred to a Surgery Clinic where, although the investigations oriented towards a liver tumor, during surgery it was discovered the presence of a tumor that did not belong to the liver parenchyma but retropertoneal tissue. The pathological anatomy confirmed the diagnosis of benign lesion tumor with conjunctiva behavior. There are discussed the relationship between autoimmune hemolytic anemia and retropertoneal tumors, diagnostic problems but also the therapeutic methods addressed in this case, represented by the surgical act, performed as a diagnostic and therapeutic purpose. Retropertoneal tumors are rare injuries, but make delicate problems of diagnosis and therapeutic attitude.

Keywords: autoimmune hemolytic anemia, retropertoneal tumors, liver tumors, hematoxylin eosin

Retroperitoneal tumors are developed on account of fat tissue, connective fascia, sheaths, vascular tissue, lymph vessels and lymph nodes or embryonic remnants, particularly derived from urinary and other structures. They are a heterogeneous group of histologically, rarely encountered in surgical practice, but the peculiarities of the space in which they develop raise serious problems of diagnosis and treatment. [1-3]

Autoimmune hemolytic anemia is known as a paraneoplastic syndrome secondary to lymphoproliferative diseases, but have also been reported cases of autoimmune hemolytic anemia secondary to the development of solid tumors. [11, 12]

Autoimmune hemolytic anemia secondary to the mechanism of tumor growth remains unknown; it appears that B lymphocytes produced by the monoclonal immunoglobulins on their surface are responsible for hemolysis. Hemolysis, mainly with headquarters spleen causes a peripheral chronic anemia with splenomegaly and reticuloocytes grown; direct Coombs test positive. [10, 13-15]

Experimental part
Material and method
We present the case of a patient, aged 42 years, female, without pathological personal history, coming to the Department of Hematology of University Hospital St. Spiridon for marked asthenia and fatigue. Hematological examination revealed: severe macrocytic anemia (Hb=5.7 g/dL, VEM=105.7 µ3) hiper regenerative (reticuloocytes =17.25%), leukopenia with moderate neutrophilic in leukocyte formula (GA=1190/mm3, neutrophils=120/ mm3). Peripheral blood smear revealed leucocytes are very rare, severe neutropenia; erythrocyte series: anisocytosis, macrocytosis, polikilocytosis. Biochemistry revealed cholestasis syndrome and hepatic cytolysis (TGO=37 U/ L, GGT =92 U/L), hyperbilirubinemia prominent faction on account indirect (total bilirubin=3.6 mg/dL, direct bilirubin=0.81 mg/dL) elevated LDH and serum ferritin (LDH=353 U/L ferritin=685 ng/mL). Clinical and laboratory data indicates diagnosis of hemolytic anemia. To determine if the cause is immune hemolytic anemia we have made the following determinations: Coombs test–positive. Bone marrow puncture was performed to exclude a hematologic malignancies: bone is normal; erythroblasts series is very rich (53% of total cells), macrocytosis and left shift maturing curve with increased proportion of basophils erythroblasts and pro erythroblast; granulocytic series is slightly hypoplasia (41%); Neutrophils are macrocytic and have a left shift of the maturing curve – predominates myelocytes and mtha myelocytes 29%.

At the same time, there have been made some measurements (markers for rheumatic diseases and vasculitis, viral liver tests, the dosage of thyroid hormones, HIV antibody, toxoplasmosis antibodies, antibodies against Cytomegalovirus, antibodies to infectious mononucleosis, and antibodies for systemic sclerosis, immune electrophoresis) with negative or normal results, to specify the context or etiology.
To be noted that during hospitalization in Hematology, we could not detect blood group and Rh patient and the laboratory doctor indicated achievement red cell transfusion therapy group O I, Rh negative. The abdominal computer tomography performed raised the suspicion of a liver caudate lobe tumor.

**Results and discussions**

Corroborating clinical data with laboratory results we establish the diagnosis of autoimmune hemolytic anemia. Excluding other possible causes of this, we considered the association between liver tumor and autoimmune hemolytic anemia. This association raised issues in choosing therapeutic conduct. Thus, they were given 3 units of packed red blood cells (group O I Rh negative) with clinic – biological evolution favorable (Hb = 10.8 g%). We decided to transfer the patient to the Surgery Clinic to achieve surgery and continued corticosteroid therapy initiated.

The onset of abdominal pain has been described to be about 2 months ago, initially predominant epigastric and right upper quadrant subsequently prone to expansion throughout the abdomen; in the past 3 days, the pain is widening.

Clinic she presents: general state influence; pale skin and mucous membranes, jaundice, hot, dry; Cardiovascular: blood pressure = 110/65 mmHg, urinary tract = dark urine (urine culture performed in the Hematology Clinic was negative). Local clinical examination objectified: abdomen increased volume at the expense of body fat, hollow with the respiratory movements, painful on shallow and deep palpation in epigastric and right upper quadrant; liver, spleen impalpable.

Abdominal ultrasound revealed the presence of a caudate lobe tumor hypoechogenic, homogenous, well defined, about 41/52/78 mm, compresses the portal vein (normal size); 122/52 mm spleen, splenic vein to the hilum 7 mm, free liquid in Douglas space about 26 mm.

The abdominal – pelvic computer tomography made, describes an expansive tumor on caudate liver lobe of 55/50 mm, native hypodense, heterogeneous, with a central hypodense area. The tumor is presented well defined, with mass effect on trunk portal (moved forwards, permeable), the inferior cave vein and the left renal vein spills, both permeable and the pancreatic head and process uncinated (moved above). The tumor comes into contact with part II and III of the duodenum, with boundary.

Biological samples collected in Surgery Clinic: macrocytic anemia (Hb = 11.3 g/dL, VEM=100.6 ì³); leukocytosis (13.740/mm³), lymphocyte (7.4%), hepatic cytolysis syndrome (TGP = 185 mg/dL), hyperbilirubinemia (total bilirubin = 1.89 mg/dL, direct bilirubin = 0.61 mg/dL). Following explorations that we have made, following diagnoses were established: observation liver tumor, severe secondary autoimmune hemolytic anemia, chronic gastritis.

During surgery we have discovered a tumor that did not belong to the liver parenchyma but retroperitoneal tissue, developed into liver pedicle and inferior cave vein diameter 40/26 cm, elastic consistency renitent with indurated zones, well encapsulated. We some difficulty we completed the excision of the tumor with hemostasis in almost near.

Histopathological examination revealed the presence of a tumor lesions nature conjunctiva with benign behavior, a myofibroblast inflammatory tumor or a solitary fibrous tumor.

The technique used in this case was eosin – hematoxylin coloration – method commonly applied for histopathological analysis of tissues. Eosin, called tetrabromo
fluorescein, is a red fluorescence dye, formed by the addition of bromine on fluorescein. It is a dye used to highlight the cytoplasm and collagen fibers. Eosin is used as a contrast medium in staining with hematoxylin, eosin staining the pink–orange cytoplasm and the nucleus in blue or purple. Eosin stains also in deep red erythrocytes.

Conclusions

Although CT scanning is the most important exploration of the arsenal used to diagnose this tumor, that and abdominal ultrasound, could not specify affiliation organ tumor and no vascular or visceral relationships thereof. The main therapeutic attitude used for retroperitoneal tumors is the surgical act, performed in diagnostic and therapeutic purposes; these are associated for malignant tumors with chemotherapy and radiant treatment [7-9].

The main problems of surgical treatment in retroperitoneal tumors are related to the chosen route of approach, the surgical exploration as complete, the need of visceral sacrifices and vascular associated with difficulties of hemostasis in the remaining space after removal of the tumor and difficulties in the limits of excision, safety tumor excision complete (our case) or the purpose of reducing the tumor mass [4, 5].

The bleeding risk in retroperitoneal tumors is important not only because of vascular relations but also because these tumors determines in the retroperitoneal space the development of dilated venous vasculature or because the tumors themselves are hypervascularized [6].

The histopathological result in this case was a tumor with conjunctiva benign behavior, myofibroblast inflammatory tumor or solitary fibrous tumor. Retroperitoneal tumors are rare injuries, but make delicate problems of diagnosis and therapeutic attitude.

Anemia is a common complication of malignancy occurs in almost 50% of patients with solid tumors and more frequently in those with blood diseases – cancer: myeloma, leukemia and lymphoma. In our case, autoimmune hemolytic anemia was secondary to retroperitoneal tumor growth, as proof, after the extraction of tumor, at the subsequent checks hemoglobin level was normalized in our patient.

References


Immediate postoperative course of the patient was favorable, on postoperative day 9 being discharged.

Hematoxylin is a natural dye extracted from the tree **Haematoxylum campechianum** (colored wood). By oxidation is converted into haematin, a compound of the blue–violet staining intensity. This is used together with a mordant (usually salts of Fe (III) or Al (III)) for staining the nucleus of cells.

Immediate postoperative course of the patient was favorable, on postoperative day 9 being discharged.

References


Immediate postoperative course of the patient was favorable, on postoperative day 9 being discharged.