A fifteen-year-old girl, a known case of beta-thalassemia major, was referred to the university hospital with a hepatomegaly which was revealed during routine check-up. The physical examination was normal and the patient had no accompanying signs or symptoms including abdominal pain, weight loss, nausea, vomiting, diarrhea, constipation, icterus, or pruritus. The vital signs were also normal. Abdominal ultrasonography showed a hepatomegaly with a 14.5 cm × 12.5 cm hypoechogenic mass in the posterior part of the right lobe of liver. There was an echogenic band inside the mass. Computed tomography (CT) scan (Figure 1) showed a well-defined hypodense solid mass in the posterior part of the right liver lobe, showing a homogeneous enhancement with central necrosis. The right kidney was deviated infromedially. The spleen was larger than normal. Magnetic resonance imaging (MRI) also was done and no additional information was reported.

What is your diagnosis?

See the next page
Photoclinic Diagnosis: **Solitary Huge Intrahepatic Mass (Extramedullary Hematopoiesis)**

Differential diagnoses were cavernous hemangioma, hepatocellular carcinoma, and adenocarcinoma. The patient underwent a fine needle aspiration and the pathology report revealed extramedullary hematopoiesis (Figure 2).

Extramedullary hematopoiesis means hematopoiesis which occurs outside the bone marrow and peripheral blood when the bone marrow is unable to produce enough blood cells. It usually happens to compensate inadequate hematopoiesis in about 15% of thalassemic patients.\(^1\)\(^-\)\(^2\) It also may happen in other diseases like myelofibrosis, polycythemia vera, pernicious anemia, sickle-cell anemia, and Hodgkin lymphoma.\(^3\) Most of the times it is microscopic, but it may sometimes occur as organomegaly or mass, like the one we have presented here.

### References