

Case presentation:

A 62-year old, previously healthy, woman was admitted to our Emergency Department (ED) because of a fortnight's dyspnea and peripheral edema. Physical examination revealed slight fever, tachycardia, pale skin and mucosae, distension of neck veins with a positive hepatojugular reflux, dullness in the percussion of right lung base, where no breath sounds were heard, and hepatomegaly. The electrocardiogram showed sinus tachycardia and a pattern of right ventricular strain (S1Q3T3), the chest radiogram revealed a prominent elevation of the right hemidiaphragm. The main laboratory findings were neutrophilia, microcytic anemia with a mixed pattern of blood loss and chronic disease, marked alteration of all inflammation indexes and liver function tests, slight elevation in troponin I, hypoxemia and a minimal respiratory alkalosis.

Diagnosis and treatment in the ED:

The patient underwent a high-resolution CT scan, which showed a diffuse consolidation and ground-glass opacification of the left lung, compression of right lung basis (with atelectasis and a moderate pleural effusion) and right atrium by a huge nodular liver, compression of inferior vena cava and hepatic veins, minimal ascites (figures 1 and 2). The patient was started a treatment with ceftriaxone and fluid replacement.

Final diagnosis and evolution:

Body temperature, blood pressure and heart rate were normal on day 3. Cardiac ultrasonography ruled out any intrinsic heart disease, while the fine-needle aspiration of liver revealed adenocarcinoma cells. Escherichia coli grew in blood cultures. On day 8, the patient underwent a colonoscopy, which showed a large and stenosing rectal mass. The final diagnosis was rectal adenocarcinoma, TxNxM1, Dukes D. A palliative chemotherapy with the Folfox-6 regimen was started in the Oncology Department on day 13, but the clinical course was unfavourable and rapidly progressing to hepatic failure and death of the patient on day 17.

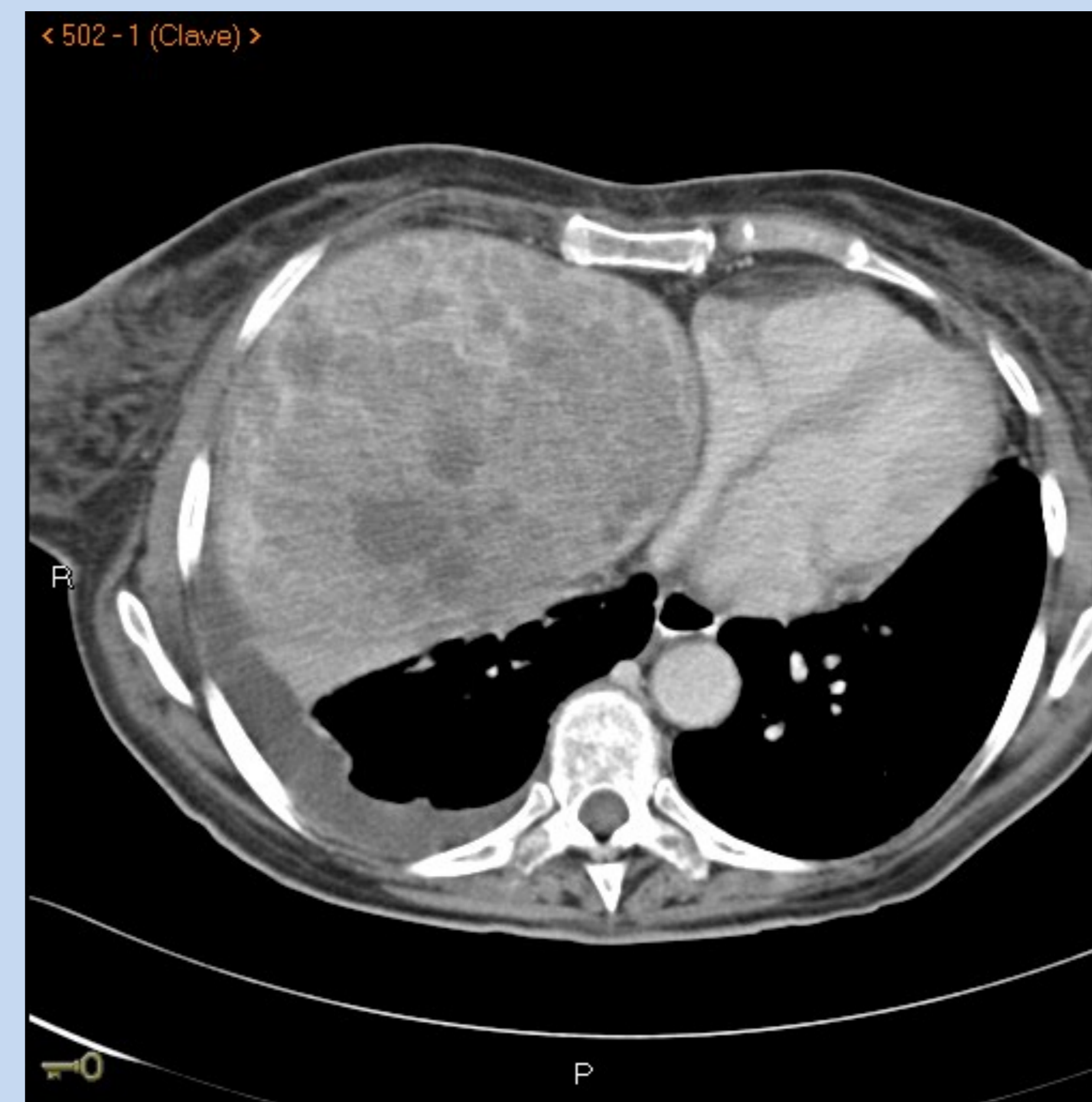


Figure 1: High-resolution CT scan image, showing compression of right atrium by a huge nodular liver.

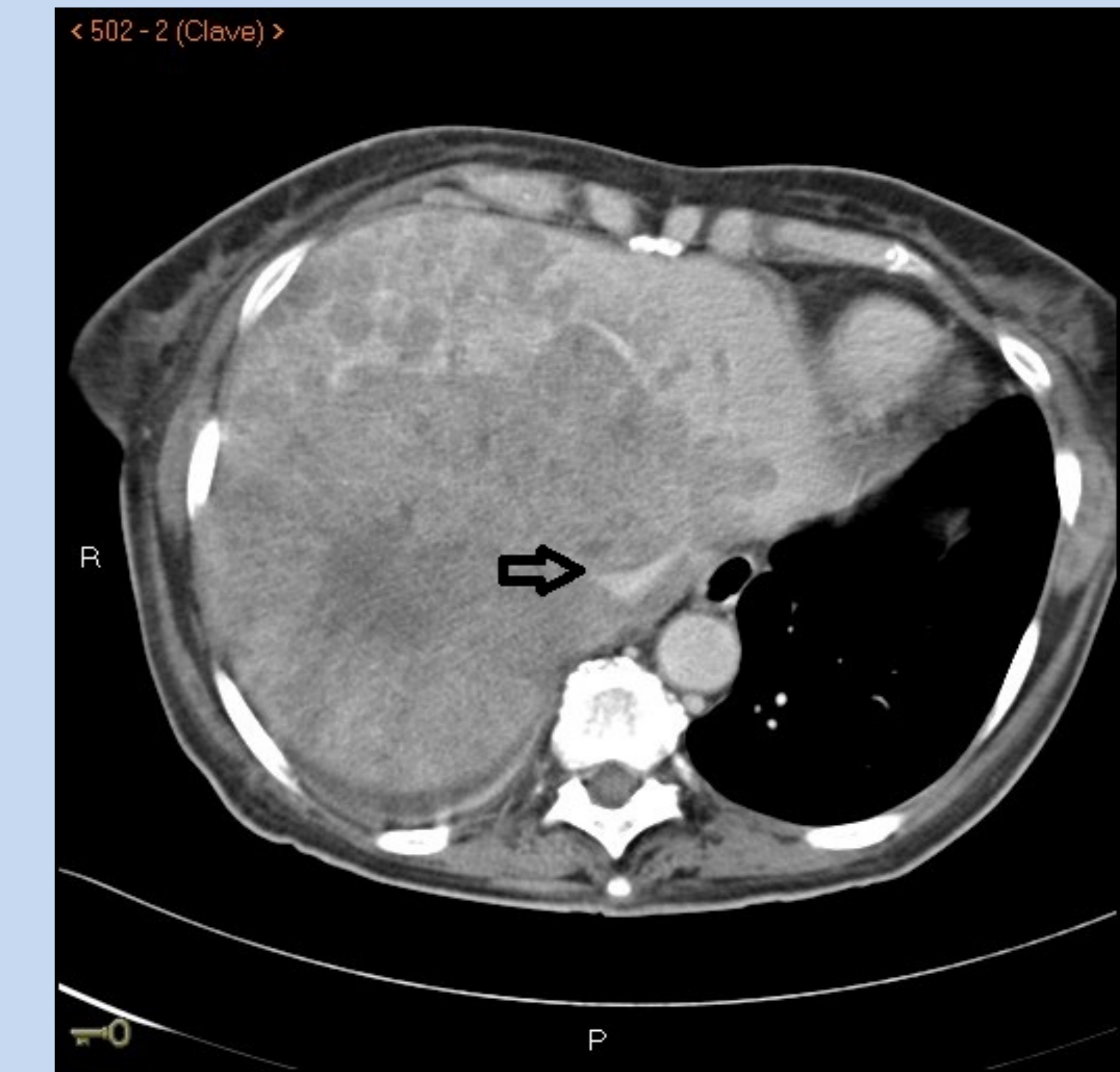


Figure 2: Compression of inferior vena cava (arrow) in high-resolution CT scan.

Discussion:

Colorectal cancer symptoms include GI bleeding, changes in bowel habits, abdominal pain, intestinal obstruction, weight loss, change in appetite, fatigue. Hepatomegaly and pulmonary signs may be present with metastatic disease, along with anemia and alterations in liver tests. 15-25% of patients have liver metastases at the time of diagnosis. Our patient called for medical attention very late, because of dyspnea and peripheral edema; the latter was part of a right-sided heart failure, caused by compression of right atrium and inferior vena cava by an enormous metastatic liver. To our knowledge, no such presentation of colorectal cancer has been previously described.