

Treatment Resistance in Gastrointestinal Stromal Tumor

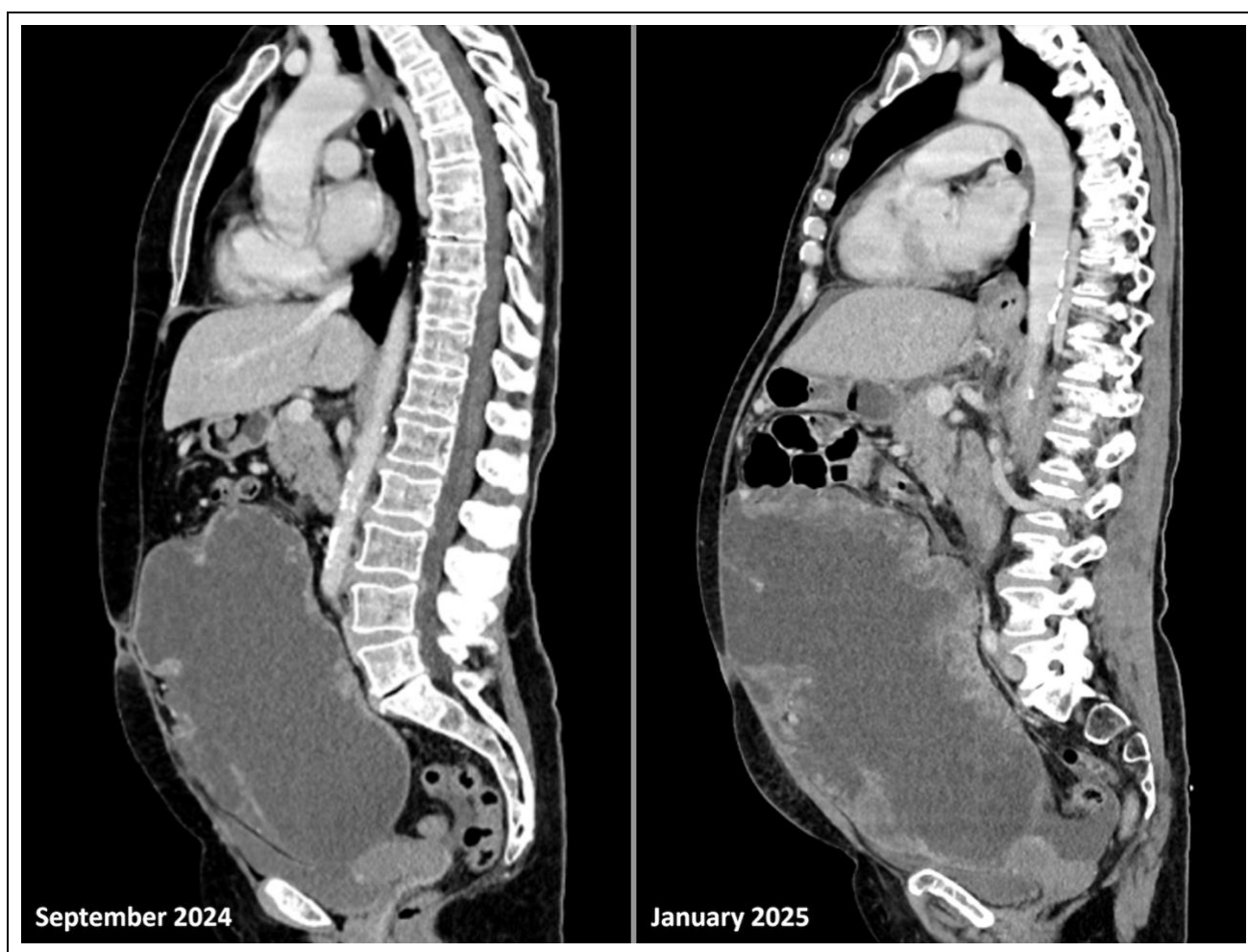
Marisa C. Couto*, Ana Catarina Fernandes, Nuno Teixeira Tavares and Miguel Barbosa

Serviço de Oncologia Médica, Unidade Local de Saúde de São João; Porto, Portugal

*Corresponding author: Marisa C. Couto, Serviço de Oncologia Médica, Unidade Local de Saúde de São João; Porto, Portugal.

E-mail: coutomarisa18@gmail.com

Received: August 23, 2025; Accepted: September 01, 2025; Published: September 15, 2025



Clinical Image

Female, 70-year-old. Diagnosed with pelvic GIST with hepatic metastases in April 2017. No KIT or PDGFRA mutations were identified. Started on imatinib 400mg daily, achieving disease control for four years. Due to progression of liver metastases, even with 800mg of imatinib, sunitinib and regorafenib were used as second- and third-line therapies. Fourth-line ripretinib was administered for 12 months until progression. Next-generation sequencing on a second biopsy revealed KRASG12D and KIT Y823D mutations and the patient started fifth-line sorafenib with progression after four months, as shown in the figure. To control the disease and symptoms, sixth-line nilotinib was tried for three months until April 2025. However, due to clinical deterioration the patient was placed on best supportive care. Hospitalization was required for symptom control and she died in June 2025. This case highlights how GIST can have an aggressive behavior and grow rapidly with the development of symptoms when resistant to multiple tyrosine kinase inhibitors.