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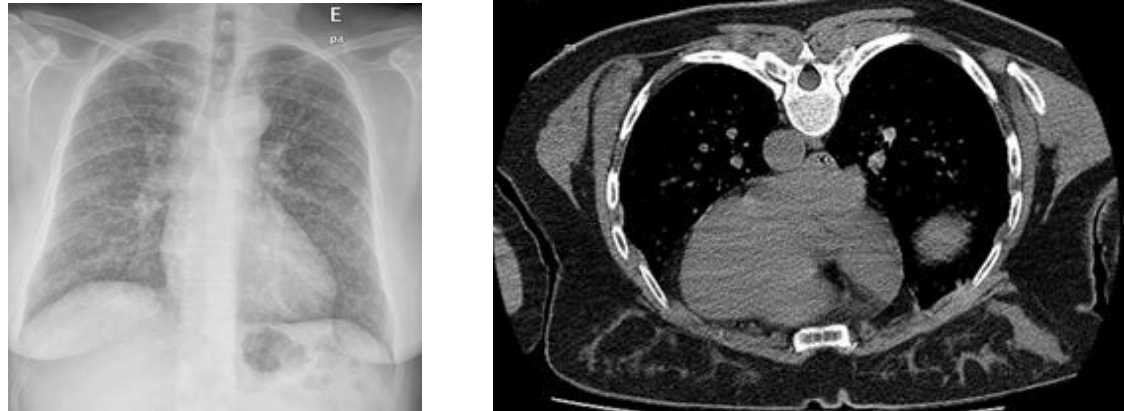

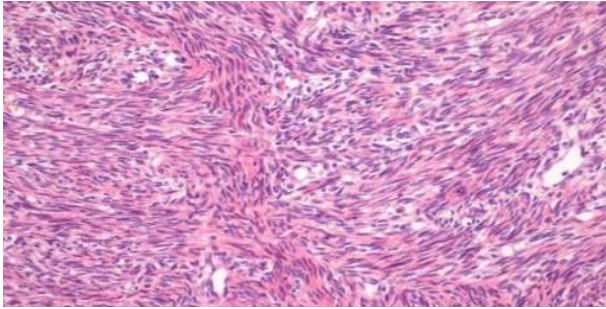
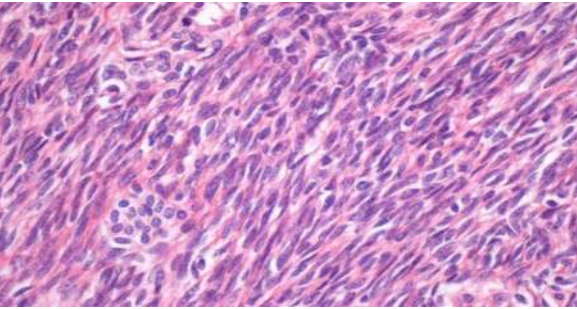
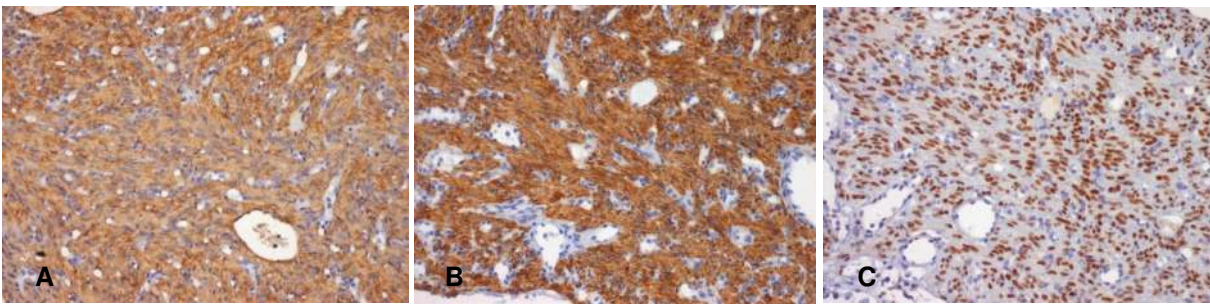
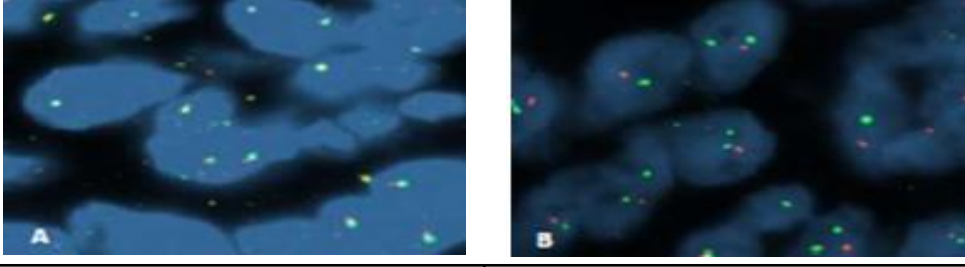
Problem Statement:

Benign metastasizing leiomyoma (BML) is a rare variant of uterine leiomyoma, characterized by multiple leiomyomatous lesions in distant locations, most commonly the lungs. Patients are usually asymptomatic and the disease is discovered incidentally. Histopathological confirmation is required for definitive diagnosis. Treatment of BML is controversial. The course of this disease is usually indolent, but requires close surveillance.

Methods:

Overview of two clinical cases of BML diagnosed in Portuguese Oncology Institute of Porto in the first semester of 2017 and review of the literature.

Case Reports:

	Case Report 1	Case Report 2
Identification	49-year-old premenopausal woman	48-year-old premenopausal woman
Medical History	Total hysterectomy 10 years previously for uterine leiomyoma	Total hysterectomy 13 years earlier for uterine leiomyoma
Clinical presentation	Asymptomatic. Incidental diagnosis.	Persistent cough.
Imaging findings:	 <p>Miliary pattern</p>	 <p>Multiple pulmonary bilateral nodules</p>
• Chest radiography and computed tomography (CT)	Positron emission tomography: Weak fluorodeoxyglucose (FDG) uptake in lung nodules.	
• PET		
Diagnosis:	  <p>Spindle cells consistent with smooth muscle differentiation, without cellular atypia, necrosis nor mitotic figures.</p>	
CT-guided biopsy of a pulmonary nodule and review of uterine specimen previously resected.	 <p>A. Smooth Muscle Actin; B. Desmin; C. Estrogen and Progesterone Receptors.</p>	
Both specimens showed identical histopathology, immunohistochemical and cytogenetic characteristics.	 <p>A. 22q12 deletion; B. 19q13 deletion.</p>	
	Histopathologic examination	
	Immunohistochemical staining	
	Cytogenetic study, using "fluorescence in situ hybridization" (FISH)	
Treatment	Bilateral salpingo-oophorectomy followed by Letrozole.	Bilateral salpingo-oophorectomy.
Follow-up	6 months: No further development of the disease occurred.	3 months: The remaining lesions remained stable.

Conclusion:

✓ BML diagnosis is **challenging** and should be based on similar histopathological and immunohistochemical pattern between lung nodules and uterine leiomyoma. When the uterine specimen is not available for retrospective review, the presence of consistent **chromosomal abnormalities (deletions of 19q and 22q) is highly suggestive of BML**, allowing its individualization as a **genetically distinct entity**.

References:

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