Biphasic Synovial Sarcoma: an Exceptional Rare Cervical Mass Adina Ghemigian <sup>1</sup>, Mara Carsote <sup>1</sup>, Rodica Petris <sup>2</sup>, Anda Dumitrascu <sup>2</sup>, Ana Valea <sup>3</sup>, Dana Terzea <sup>4</sup>, Diana Loreta Paun <sup>1</sup>



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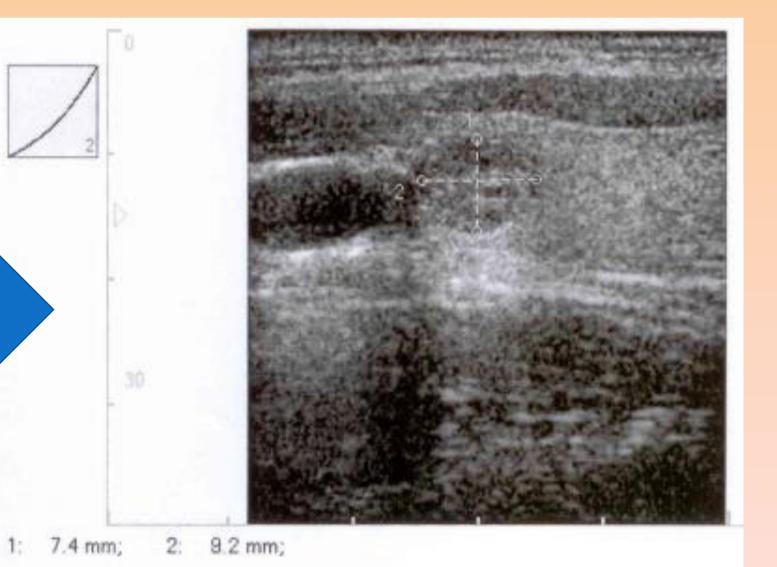
# Introduction

Synovial sarcoma represents a type of cancer derived from soft tissues; young males are more affected.

## Material & Methods

This is a case report of a male with a cervical mass confirmed as sarcoma. Later on the investigations lead to the discovery of a thyroid nodule challenging the differential diagnosis. We assessed thyroid ultrasound, computed tomography (CT) at the cervical, thorax, mediastinum and abdomen; TSH (Thyroid Stimulating Hormone), TPO antibodies (anti-thyreoperoxidase); pathological and immune-hysto-chemistry (IHC) reports.

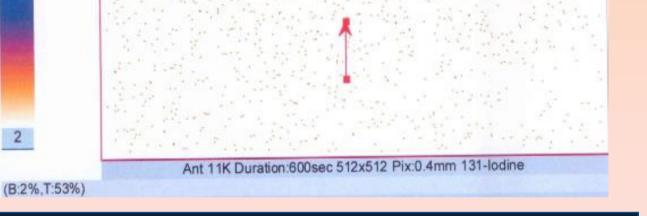
Thyroid ultrasound: a small thyroid nodule discovered during followup for cervical sarcoma



131 I thyroid scintigrame; the thyroid nodule discovered at ultrasound is not distinctive; moreover, the area of sarcoma does not associate radioiodine

#### on a young adult male

up-take





A 31-year patient accidentally discovered by self-palpation a right cervical mass which required investigations including CT. An oval, well shaped, encapsulated tumor of 4.7/3.5 centimeter (axial plane) was found with inhomogeneous structure (and some areas of necrosis) at the level of right lateral wall of oro-pharynx. Cranio-caudally, the mass was situated between cervical vertebras C2-C6. The lesion was removed and a biphasic synovial sarcoma was confirmed: highly cellular structure with oval cells and reduced eosinophilic cytoplasm, small amorphic cysts, multiple vascular elements of hemangioperycitoma- like pattern, and an epithelial component with glandular elements. IHC revealed: positive VIM, TLE-1, EMA, MIC2 in tumor cells, negative SOX10, S100, positive ACT and CD34 reaction for vessels. After surgery, CT did not find any secondary lesions (neither local or at distance) except

### for a small thyroid nodule.

The thyroid ultrasound identified a hypo-echoic, inhomogeneous nodule of 1.44/ 0.78cm at inferior right lobe. Endocrine profile revealed: TSH=1.27µUI/mL(N:0.5-4.5µUI/mL), TPO=10UI/mL(N:0-35UI/mL), parathormon of 43.54pg/mL(N:15-65pg/mL). Neuroendocrine markers were: chromogranin A of 42mg/mL(N:20-125ng/mL), neuron specific enolase of 4.2ng/mL(N:0-12ng/mL), circulating serotonin of 95.4ng/mL(N:40-400ng/mL), calcitonin of 1ng/mL (1-11.8ng/mL).
Fine needle aspiration pointed benign features. Close follow-up is recommended knowing the general

oncologic and particular thyroid context.

# Conclusion

Biphasic synovial sarcoma of cervical origin is extremely rare and thyroid may be involved as a spreading site.

