

Ultrasonography of Parotid and submandibular glands in primary Sjögren Syndrome

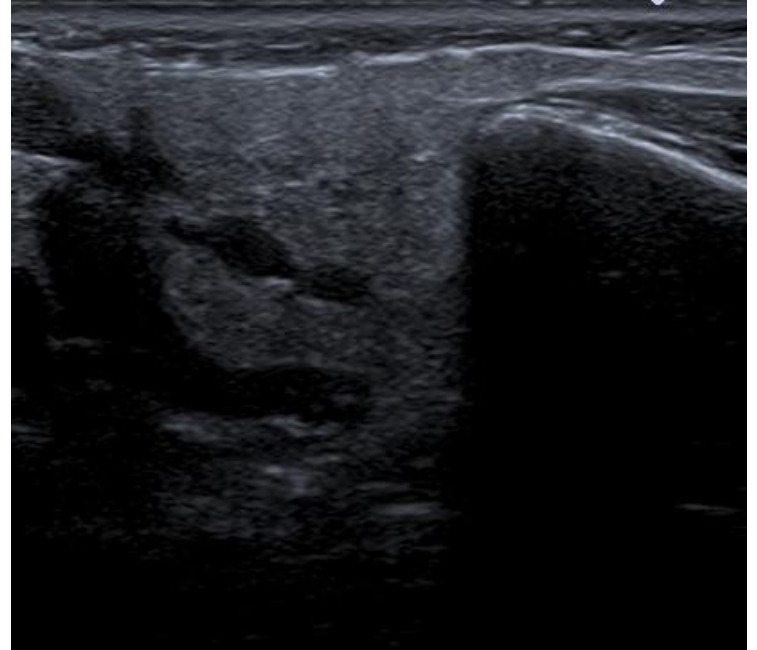
A novel reference atlas for B-mode
evaluation of parotid and submandibular glands

Sandrine Jousse-Joulin et. al

Included Salivary glands

- Parotid glands
 - Submandibular glands
- 7 items:
- Echogenicity (normal or abnormal)
 - Homogeneity and its related items:
 1. Hyperechoic bands:
 - Presence of hyperechoic bands <20%
 - hyperechoic bands between 20%-50%
 - hyperechoic bands >50%
 2. Hypo/anechoic area:
 - Isolated <25%
 - Localized 25-50%
 - Scattered
 - Diffuse >50%
 - Lymph nodes
 - Calcifications (present or not)
 - Posterior border (visible or not)

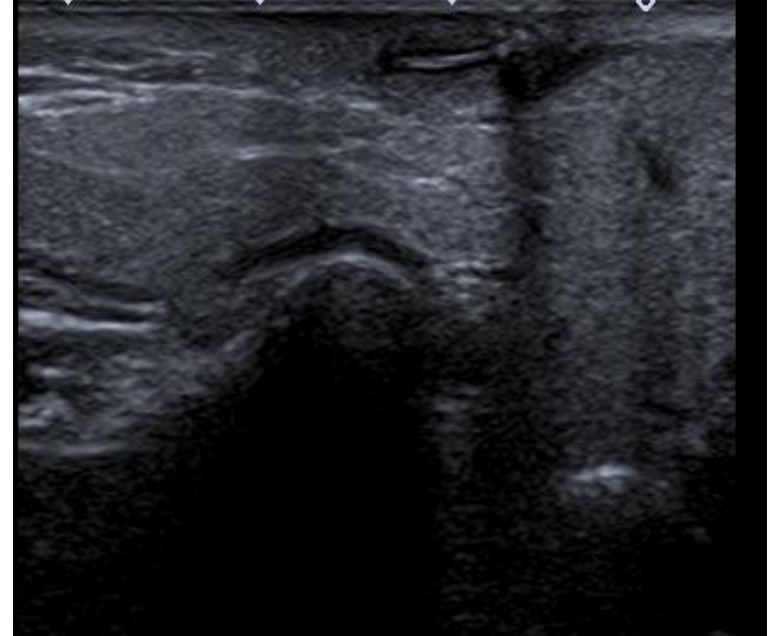
PAROTID GLAND PROCEDURE



Parotid gland in axial scan

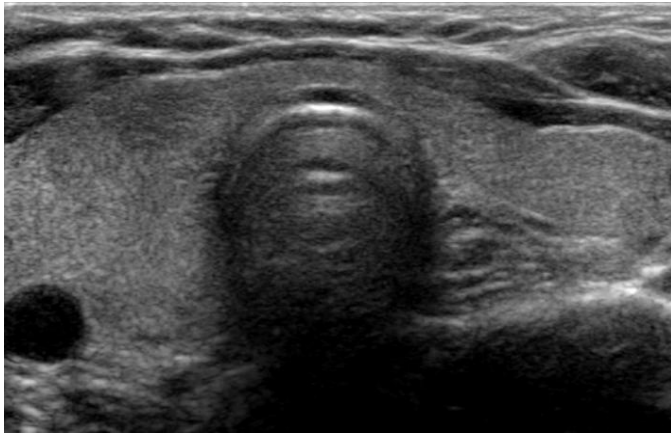
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Ultrasonography scoring
reference atlas ver 1.0

PAROTID GLAND PROCEDURE

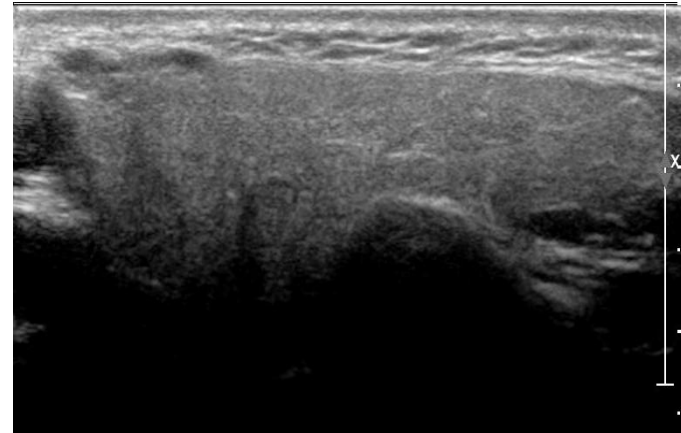


Parotid gland in longitudinal scan

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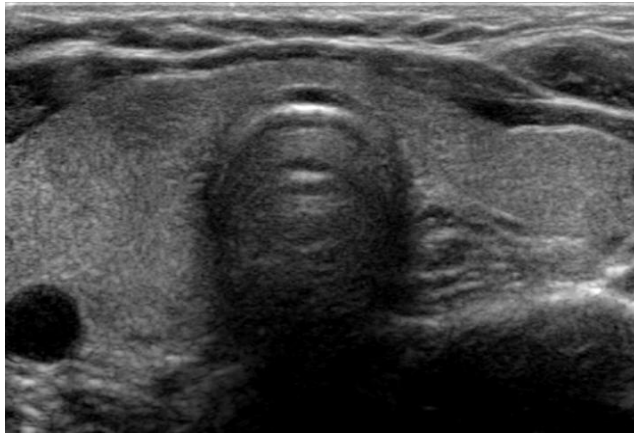
Thyroid parenchyma



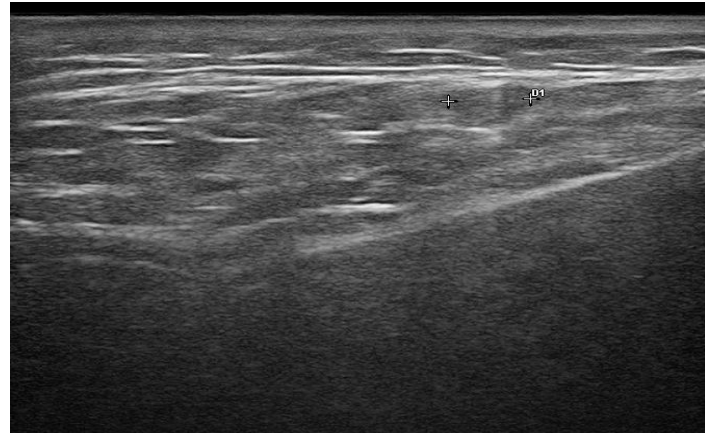
Parotid parenchyma

Normal echogenicity

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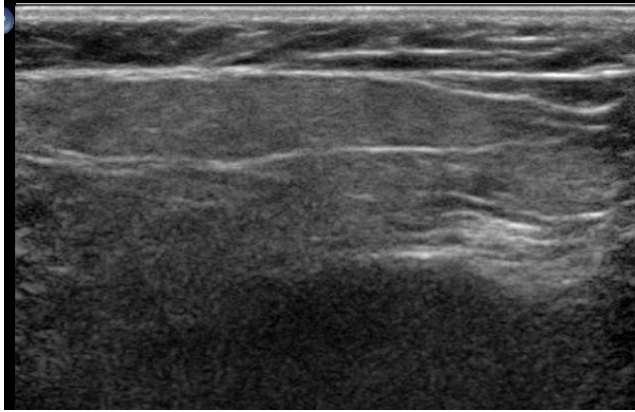
Thyroid parenchyma



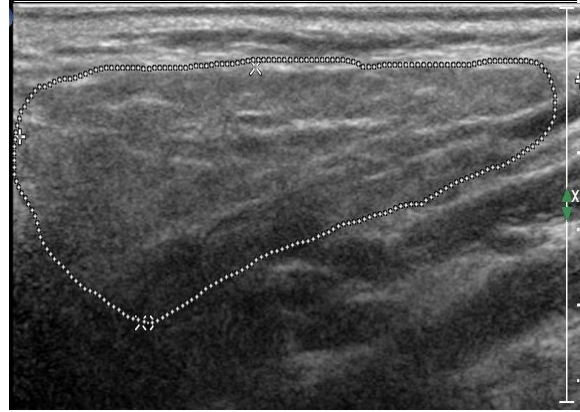
Parotid parenchyma

Abnormal echogenicity

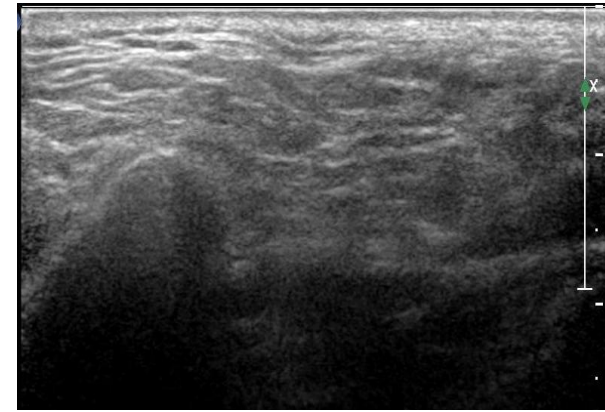
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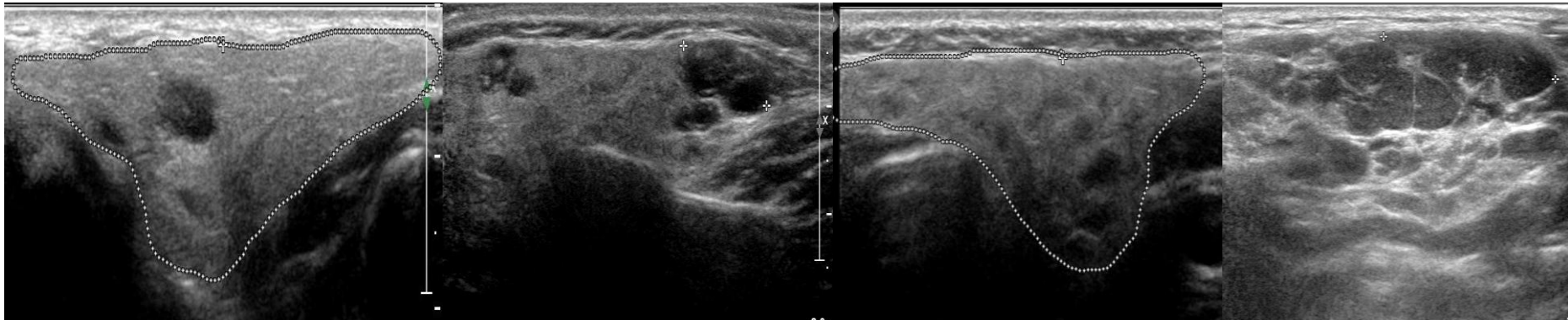
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Hyperechoic bands in parotid gland parenchyma:

1. Less than 20% of the surface
2. Between 20-50% of the surface
3. More than 50% of the surface



isolated

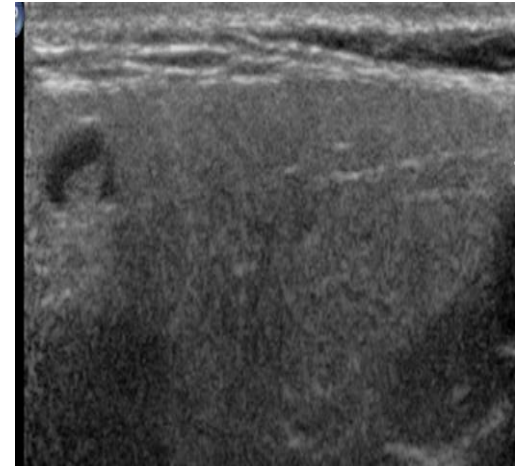
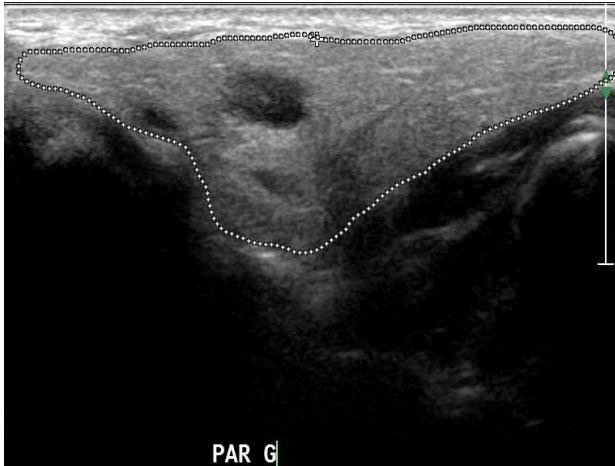
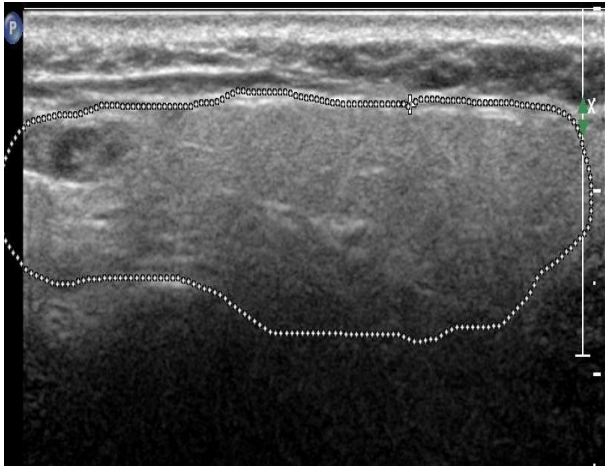
localized

scattered

diffuse

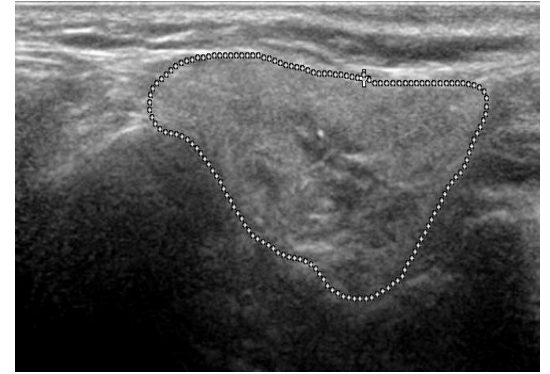
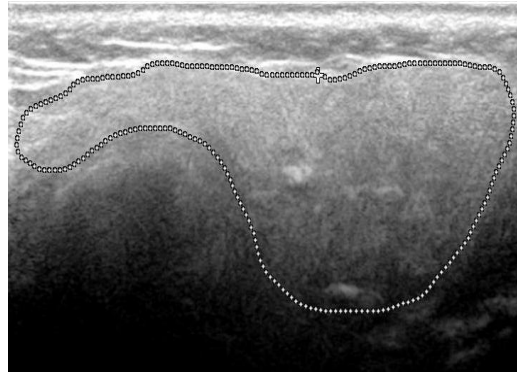
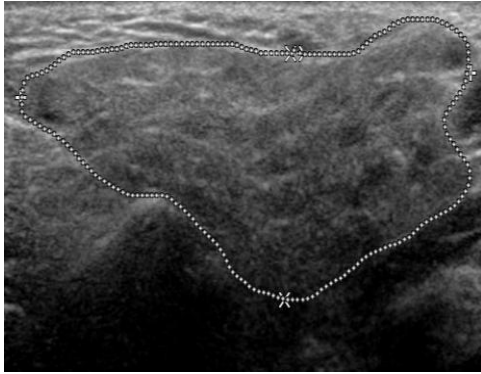
Hypo/Anechoic areas diffuse in parotid parenchyma

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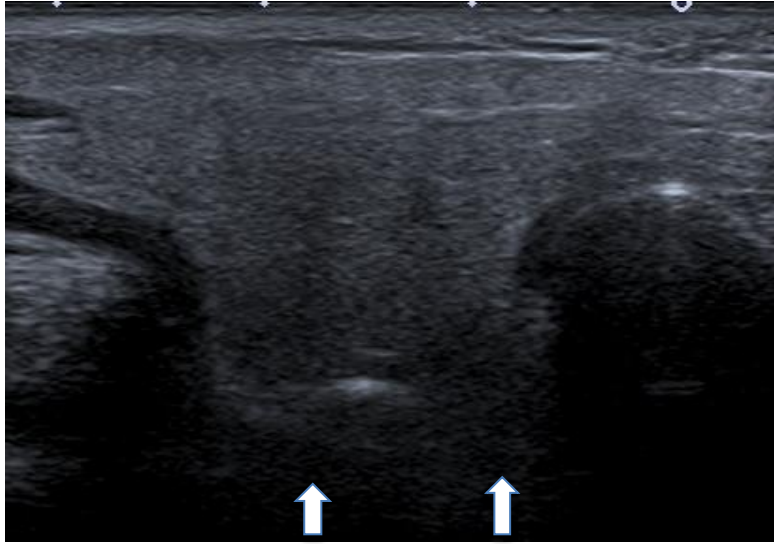
Normal lymph nodes in parotid gland

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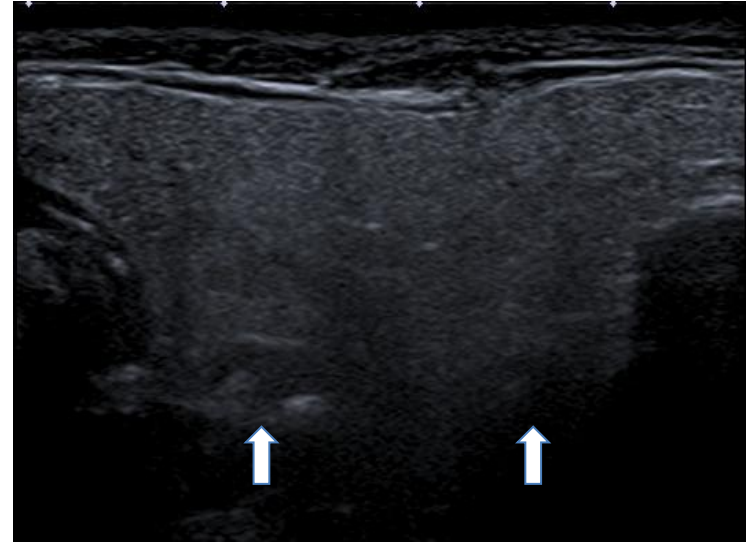


Calcifications in parotid gland

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Axial scan

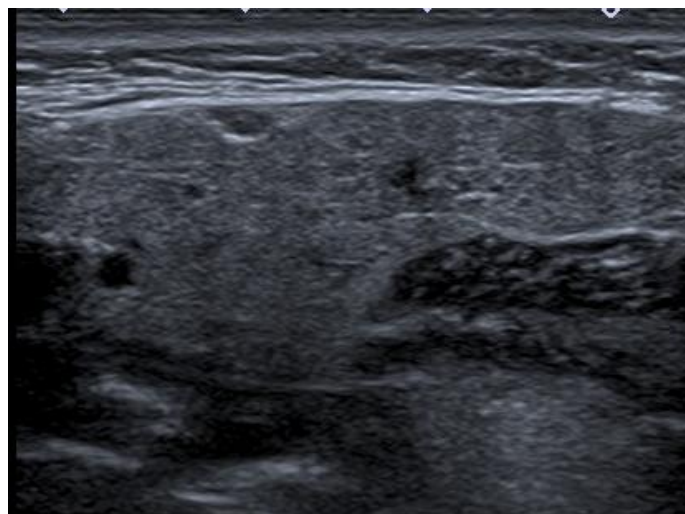


Longitudinal scan

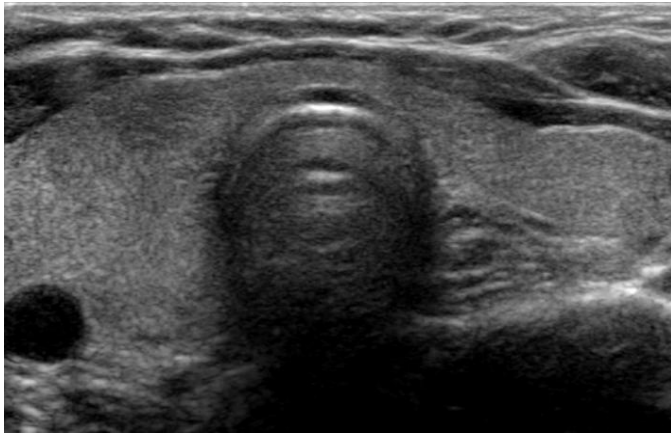
Visible Posterior border in parotid gland

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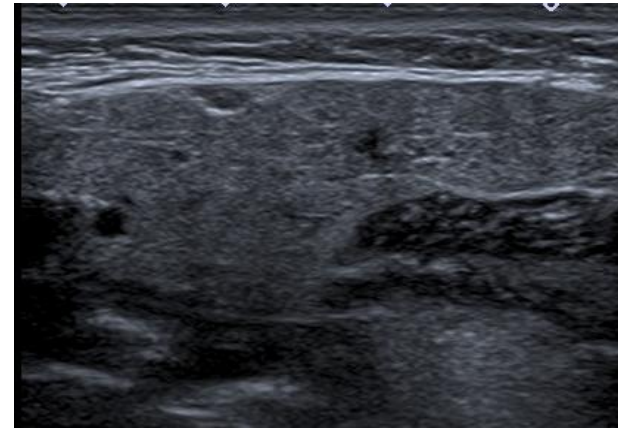
SUBMANDIBULAR GLAND PROCEDURE



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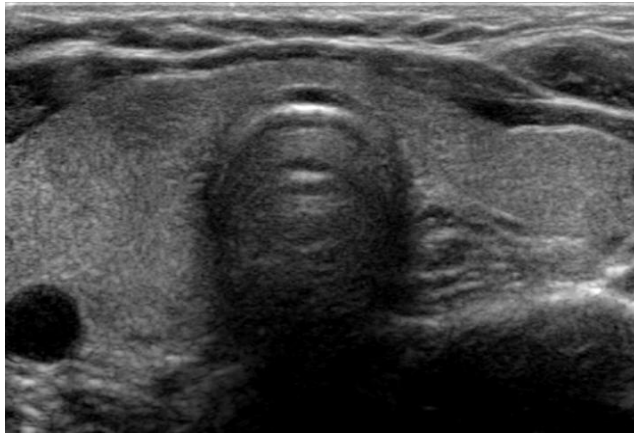
Thyroid parenchyma



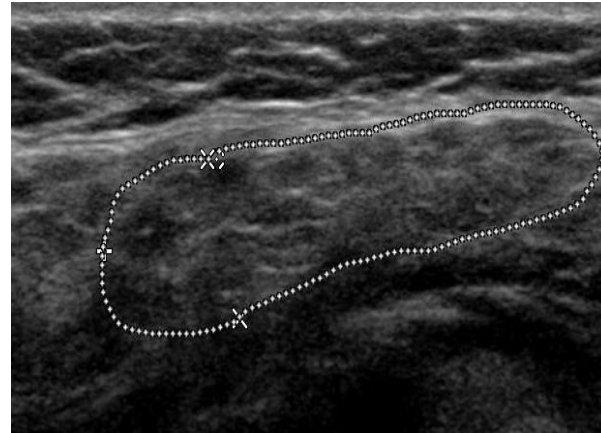
Submandibular parenchyma

Normal echogenicity

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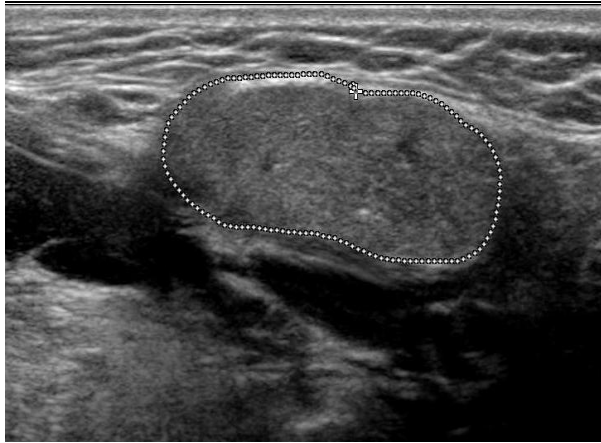
Thyroid parenchyma



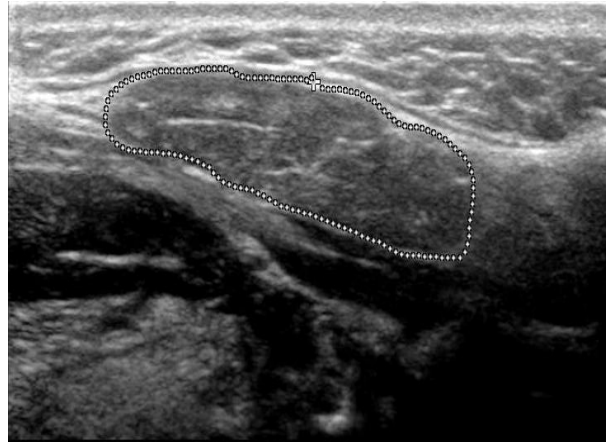
Submandibular parenchyma

Abnormal echogenicity

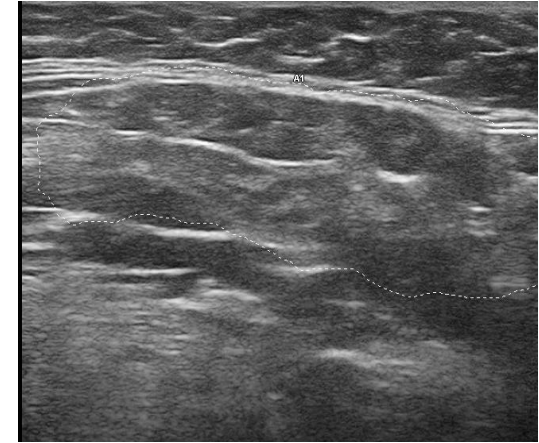
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1



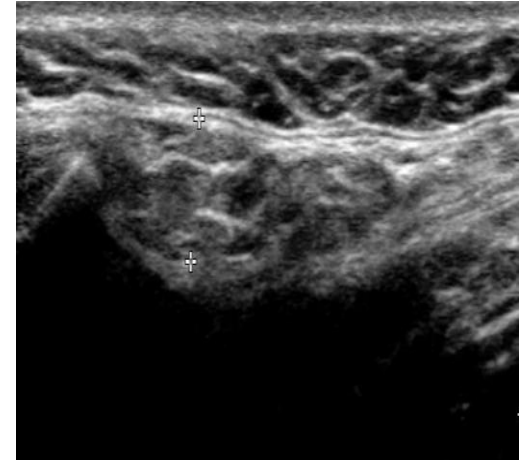
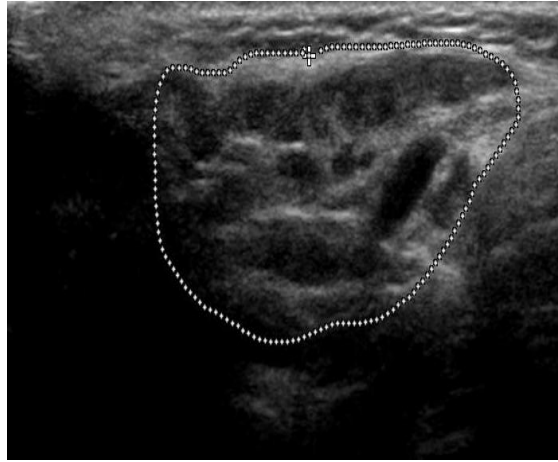
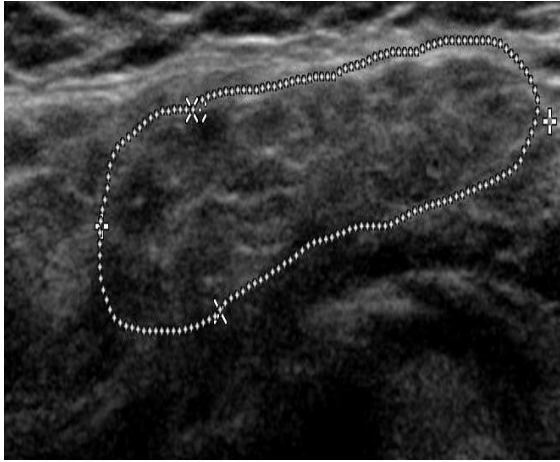
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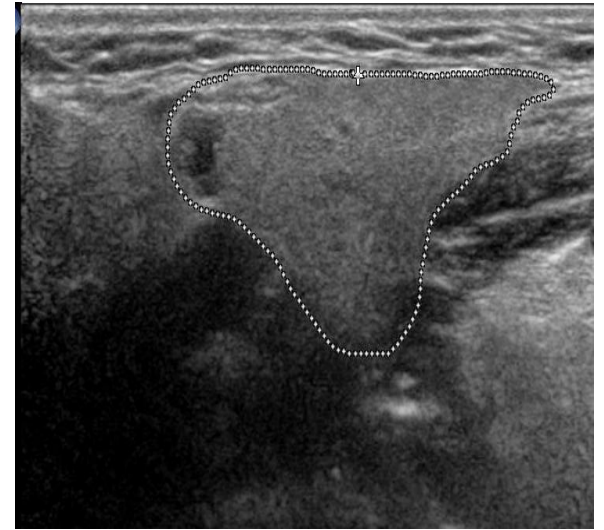
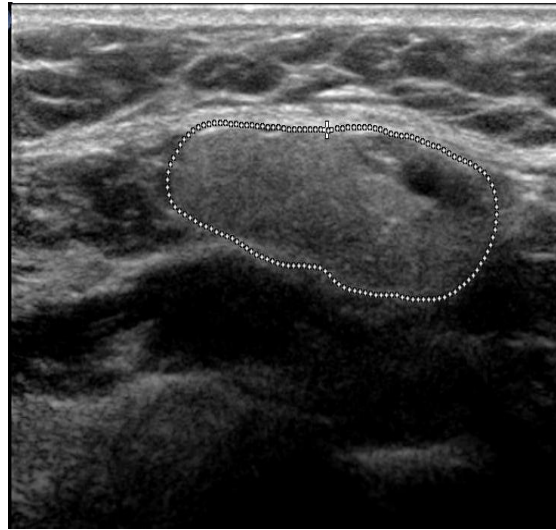
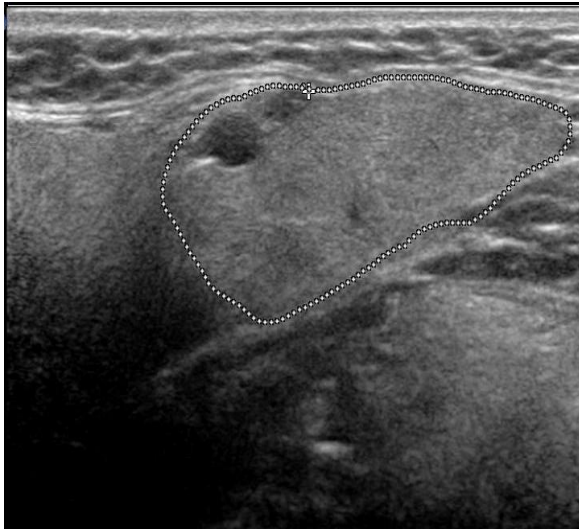
Hyperechoic bands in submandibular gland parenchyma:

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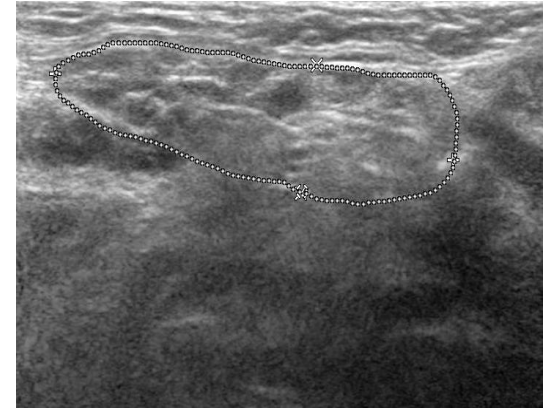
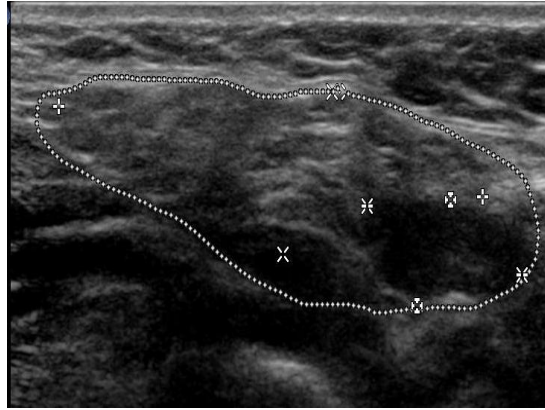
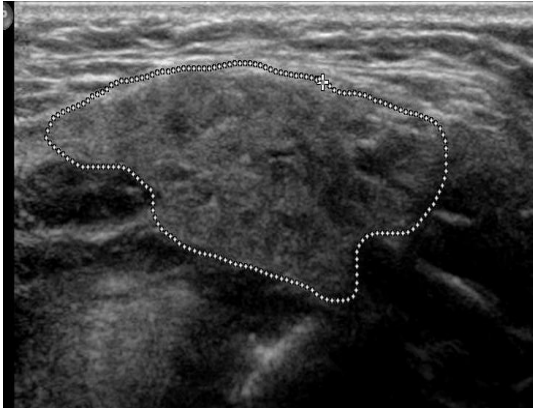
Hypo/Anechoic areas diffuse in submandibular parenchyma

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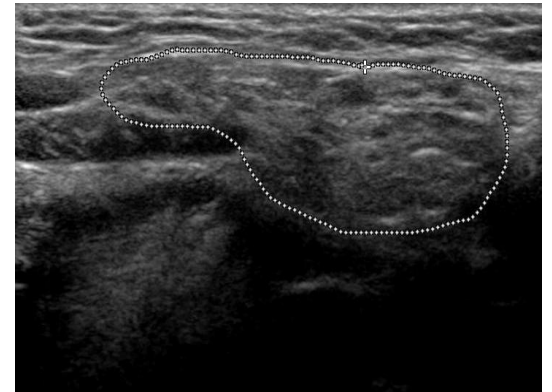
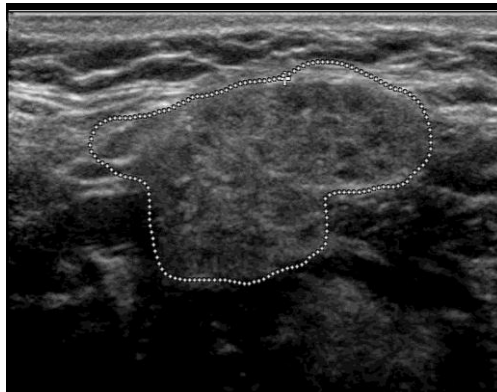
Hypo/Anechoic areas isolated in submandibular parenchyma

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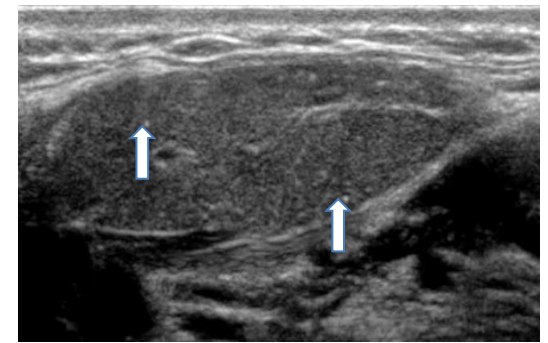
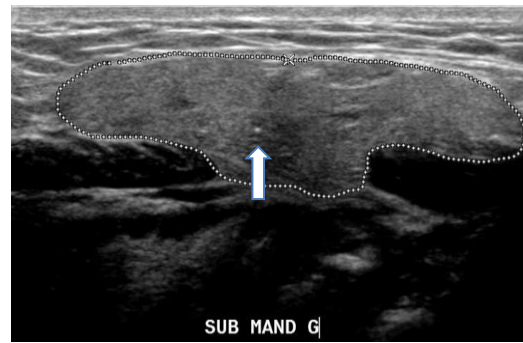
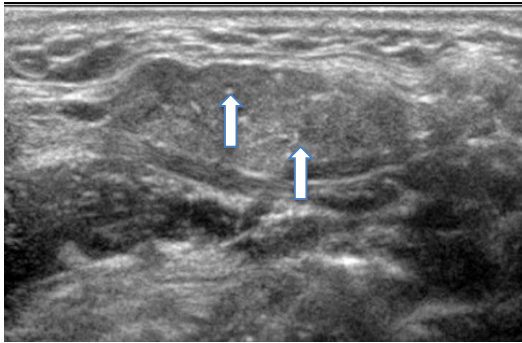
Hypo/Anechoic areas localized in submandibular parenchyma

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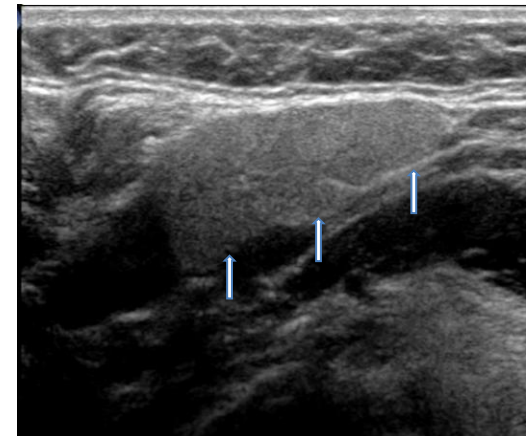
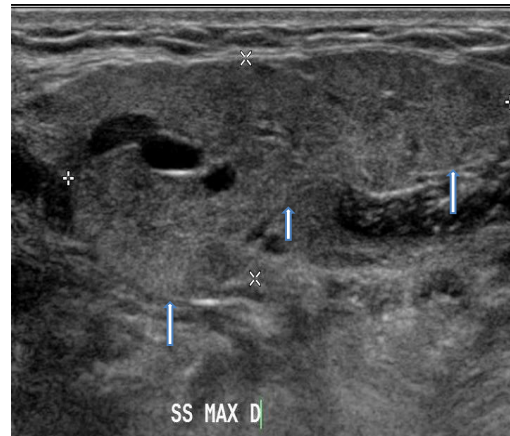
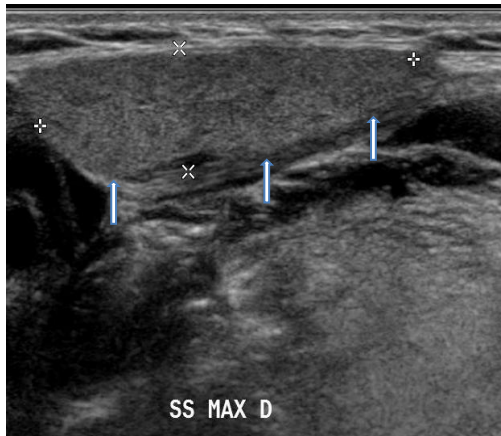
Hypo/Anechoic areas scattered in submandibular gland

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Calcifications in submandibular gland

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Visible posterior border in submandibular gland

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