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 in axial scan

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Parotid gland in longitudinal scan

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Normal echogenicity

Thyroid parenchyma
Parotid parenchyma

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Abnormal echogenicity

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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

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Hypo/Anechoic areas diffuse in parotid parenchyma

isolated    localized    scattered    diffuse

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Normal lymph nodes in parotid gland

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Calcifications in parotid gland

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Visible Posterior border in parotid gland
SUBMANDIBULAR GLAND PROCEDURE

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Normal echogenicity

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Abnormal echogenicity
Hyperechoic bands in submandibular gland parenchyma:
1. Less than 20% of the surface
2. Between 25-50% of the surface
3. More than 50% of the surface

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Hypo/Anechoic areas diffuse in submandibular parenchyma

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reference atlas ver 1.0
Hypo/Anechoic areas isolated in submandibular parenchyma

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Hypo/Anechoic areas localized in submandibular parenchyma
Hypo/Anechoic areas scattered in submandibular gland

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Calcifications in submandibular gland

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reference atlas ver 1.0
Visible posterior border in submandibular gland

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reference atlas ver 1.0