PERCUTANEOUS ETHANOL INJECTION AS A FIRST LINE TREATMENT OF CYSTIC THYROID NODULES EXPERIENCE AFTER ITS INTRODUCTION IN A UNIVERSITY HOSPITAL

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OBJECTIVE
To evaluate the efficacy, safety and patient’s pain perception of percutaneous ethanol injection treatment (PEIT) as an alternative to surgery in symptomatic thyroid cysts.

METHODS
- 30 consecutive patients (mean age: 46.10 years; 82% women). Mean symptom duration: 10.20 months.
- Symptomatic thyroid cysts relapsed after first drainage with benign cytology prior to treatment.
- Determinations:
  - Maximum cyst diameter and volume
  - Volume of fluid removed
  - Pain perceived by the patient (visual scale: virtually no pain, mild pain, moderate pain and severe pain).
  - Compressive or esthetic symptoms (domestic questionnarie: 10: absence of symptoms to 50: severe symptoms).
  - After follow-up, final cyst diameter and volume were determined and the persistence of symptoms was assessed.

RESULTS
- Sessions of PEIT to complete procedure:
  - One: 45%
  - Two: 31%
  - Three or more: 24%
- Mean extracted liquid volume: 61.36 ml.
- Pain perception:
  - 39% virtually no pain
  - 43% mild pain
  - 17% moderate pain.
- Follow-up: 9-3 months
- Volume reduction:
  - > 70%: 86.3%
  - > 80%: 61.9%
  - > 90%: 42.0%.
- Cosmetic complaints or local symptoms of compression:
  - Initial score: 22.8, final score: 13.5 (p< 0.05),
  - 47% of cases score of 10 (absence of symptoms)
- No complications

Fig 1: Evolution of cyst diameter and volume during follow-up

CONCLUSIONS
In our experience, percutaneous ethanol injection has proved to be an effective, safe and well-tolerated first-line treatment of symptomatic thyroid cysts.

REFERENCES
- Papini E, Pacelia CM, Hegeduš L: Diagnosis of endocrine disease: thyroid ultrasound (US) and US-assisted procedures. Eur J Endocrinol 2014; 170: R133-R146