

Interventional radiology of glands

Interventional radiology (IR) is the operative part of radiology providing minimally invasive image-guided diagnosis and treatment of disease. Although the range of procedures performed by interventional radiologists is broad, the unifying concept behind these procedures is the application of image guidance and minimally invasive techniques in order to minimize risk to the patient.

In the last decades, the technological advances in medical imaging modalities and in IR devices and materials allowed to extend the field of diseases reachable by IR treatments.

In this panorama lot of endocrine disorders—benign and malignant—can be treated with minimal invasive imaging guided procedures.

Notably, the thermal-ablation therapies (percutaneous application of thermal energy to biological tissue to destroy it) can be applied to different gland parenchymal in order to treat different diseases: in the thyroid gland can be used to treat benign nodule with functional and cosmetic aims (1) or neoplastic diseases combined with other therapy (2-4) and even in the pancreas tumor setting, especially in inoperable patients (5).

Recently, a lot of new IR procedures are being applied to prostate gland from invasive diagnosis to treatment of benign and malign diseases (6-8).

A new frontiers of IR applications in endocrine setting are the treatments of endocrine diseases such as the pancreatic islet percutaneous transplantation (9) and the adrenal glands IR treatments (10).

Finally, a niche role of intervention radiology is in the treatment of epiphora (11).

This special issue will provide a comprehensive overview about state-of-the art and novel developments of Interventional Radiology in endocrine setting at the doorstep to broad clinical application on the basis of review articles in combination with focused scientific papers.

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