Conclusion: Our results suggest that PIN1 plays role in cancer cell proliferation, migration and invasion in different manners according to the *TP53* status in HCC.

4. BIPOLAR RADIOFREQUENCY ABLATION FOR THYROID NODULES WITH EFFECTIVE INDUCTION OF SUFFICIENTLY LARGE LESIONS WITHOUT DANGER TO SURROUNDING STRUCTURES (EX VIVO MORPHOLOGICAL EVALUATION)

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Background: Currently, minimally invasive procedures like radiofrequency ablation (RFA) are suitable for management of both benign nodules and low-risk thyroid malignancies as well. **Aims:** To assess the basic technical feasibility of RFA in papillary thyroid carcinoma nodules.

Methods: Measurements were done in 81 human thyroid glands. The maximal time span between the thyroid resection and the experiments was 15 minutes. Thermal energy was delivered through an applicator with a diameter of 1.3 mm (18-gauge), a shaft length of 235 mm, and an active tip length of 10 mm. A power of 20 watts was applied for 10 seconds. Clearly demarcated portions of the visibly damaged area were regarded as necrosis and measured as area of the ellipsoid.

Results: The median area of unaffected papillary carcinoma nodule ($n=45$) was 84.8 mm^2 ($Q25=62.8$, $Q75=117.8$), and for benign nodules ($n=36$) was 95 mm^2 ($Q25=50.3$, $Q75=135.7$). The median area of 19.6 mm^2 ($Q25=9.4$, $Q75=28.3$) was coagulated after RFA for carcinoma, and the median area of 20.8 mm^2 ($Q25=17.3$, $Q75=34.4$) was coagulated after RFA for benign nodules. In the histological examination of thermolesion, HE-staining revealed tissue necrosis in the area between electrodes, shrinkage of the thyroid follicles next to active tips, colloid condensed, and the collagenous stroma appeared slightly haematoxyphilic, blood vessels were spastic and lymphatic vessels dilated.

Conclusion: RFA induces reproducible lesions in tumour tissue, but for the radical treatment of papillary thyroid carcinoma nodules further research should be proceed aimed to enhance the effectiveness. Intrinsic morphological characteristics (capsule, fibrosis, calcification or cysts, histological pattern or background pathology) have no effect on the extension of necrotic area (comparing extension of necrotic areas in malignant vs benign nodules: $p=0.065$). Tumour size did not correlate with the extent of damage as well.

5. HAEMOPHAGOCYTIC LYMPHOHISTIOCYTOSIS

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Haemophagocytic lymphohistiocytosis (HLH) is a rare syndrome triggered by pathological immune activation, usually due

to abnormal natural killer (NK)/T cell function. It results in uncontrolled hypercytokinaemia leading to end organ damage and is often fatal.

We present the case of Mr X, a 43-year-old man diagnosed with HLH, 6 weeks after a febrile illness. He fulfilled 6 of the 8 criteria for diagnosing HLH, i.e., fever, splenomegaly, cytopenias, hypertriglyceridaemia/hypofibrinogenaemia, haemophagocytosis in bone marrow and hyperferritinaemia.

Mr X also had positive PCR for Epstein-Bar virus (EBV) and a concurrent EBV associated extranodal (gastric) NK/T-cell lymphoma, nasal type which was the probable initiator of his HLH. EBV infection alone could also have been the initiator, but NK/T-cell lymphoma is a more common trigger, as HLH occurs in up to 20% of these lymphomas.

After failing to tolerate chemotherapy he underwent an allogeneic bone marrow transplant. Initially he responded well, with no evidence of HLH or lymphoma on bone marrow biopsy, however within 6 weeks he suffered a relapse of his NK/T cell lymphoma.

This case highlights some of the common features of HLH including the nonspecific presentation and association with NK/T-cell lymphoma and EBV infection.

6. EXTRANODAL NK/T CELL LYMPHOMA, NASAL TYPE PRESENTING AS WIDESPREAD CUTANEOUS RASH

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We present a case of a 23-year-old male, recent immigrant from Afghanistan, diagnosed with extranodal NK/T cell lymphoma, nasal type. The patient presented with widespread, non-tender and non-pruritic papules and nodules throughout the body. It is an unusual presentation for this condition. Extranodal NK/T cell lymphoma, nasal type, are rare and very aggressive neoplasms, predominantly involving the upper aerodigestive tract. Extranodal sites such as skin, soft tissue and gastrointestinal tract can be occasionally involved, in which case it is mostly localised. Morphologically, the tumour cells demonstrated a diffuse growth pattern, and consisted of small to large atypical lymphoid cells with pale cytoplasm, vesicular nuclei and irregular nuclear membranes. Focally, angiodestruction and necrosis were identified. These neoplastic cells were EBV positive and demonstrated cytotoxic phenotype. T-cell receptor gene rearrangement studies showed germline configuration. This case is presented to highlight the unusual clinical manifestation of a rare and aggressive lymphoma.

7. THE CILATED MUCONOCULAR PAPILLARY TUMOR OF THE LUNG

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Background: Ciliated muconodular papillary tumors (CMPT) are newly defined low-grade malignant tumors, characterised as papillary tumors consisting of ciliated columnar, goblet, and basal cells.