

8th International Conference on Endocrinology, Diabetes and Metabolism

March 23, 2023 | Webinar

Accepted Abstracts



Received date: 06-11-2022 | Accepted date: 08-11-2022 | Published date: 08-05-2023

Thyroid Hormone Regulates Glutamine Metabolism and Anaplerotic Fluxes by Inducing Mitochondrial Glutamate Aminotransferase GPT2

Annunziata Gaetana Cicatiello¹, Serena Sagliocchi¹, Annarita Nappi¹, Emery Di Cicco¹, Caterina Miro¹, Melania Murolo¹, Mariano Stornaiuolo¹ and Monica Dentice^{1,2}

¹University of Naples "Federico II", Italy

²CEINGE–Biotecnologie Avanzate Scarl, Italy

Thyroid hormones (THs) are key metabolic regulators coordinating short- and long-term energy needs. In skeletal muscle, THs modulate energy metabolism in pathophysiological conditions. Indeed, hypothyroidism and hyperthyroidism are leading causes of muscle weakness and strength; however, the metabolic pathways underlying these effects are still poorly understood. Using molecular, biochemical and isotope-tracing approaches combined with mass spectrometry and denervation experiments, we found that THs regulate glutamine metabolism and anaplerotic fluxes by up-regulating the Glutamate Pyruvate Transaminase 2 gene (GPT2). In humans, GPT2 autosomal recessive mutations cause a neurological syndrome characterized by intellectual disability, microcephaly, and progressive motor symptoms. Herein, we demonstrate a new role of TH/GPT2 axis in skeletal muscle, regulating muscle weight and fiber diameter in resting and atrophic conditions and resulting in protection from muscle loss during atrophy. These results describe a new anabolic route by which THs rewire glutamine metabolism towards the maintenance of muscle mass.

monica.dentice@unina.it

Received date: 08-12-2022 | Accepted date: 12-12-2022 | Published date: 08-05-2023

Aggressive thyroid carcinoma mimicking a benign histiocytic proliferation – Utility of tumor markers to approach diagnosis

Beverly Y Wang

UC Irvine Medical Center, USA

Background: It is unusual for a malignant neoplasm to have morphologic resemblance to a benign disorder. We present a case of an unusual clinically aggressive thyroid carcinoma that morphologically mimicked a benign entity.

Clinical History: A 58-year-old Vietnamese woman underwent a partial thyroidectomy followed by radioactive iodine 131 ablation for a “medullary thyroid cancer”. Two months later, tissue samples failed to disclose a recurrence of the tumor. CT scan revealed a large thyroid mass with hemorrhage encroaching the trachea and bilateral pulmonary nodules consistent with metastasis. She underwent repeat neck exploration and hematoma evacuation. This surgical specimen had a benign appearing histiocytic proliferation with a high proliferative index (Ki-67 of 20%). A repeat review of the previous tissue sample showed a microscopic focus of thyroid follicles that merged imperceptibly into adjacent areas of foamy histiocytic proliferation. The final diagnosis was a poorly differentiated thyroid carcinoma. Although the patient was treated with chemotherapy concurrent with radiation, she rapidly deteriorated and succumbed to her illness.

Summary: To our knowledge, this report represents a rare case of an aggressive poorly differentiated thyroid carcinoma variant mimicking a benign histiocytic proliferation.

Conclusion: A malignant tumor mimicking a benign tissue has grave implications for patient care. Careful review of tissue samples and appropriate use of biomarkers to achieve accurate diagnosis is paramount to providing best oncologic care.

Biography

Beverly Wang is a professor of University of California School of Medicine at Irvine. She received her training at Mount Sinai Medical Center, New York, also completing a cytopathology fellowship. She is a general surgical pathologist, specializing in head and neck. She is vice chair of pathology and laboratory medicine, and chief of anatomic pathology, overseeing anatomic pathology services. Her clinical interests include translational research, correlating head and neck diseases, and tumors. Wang has published extensively. She has been awarded a number of prestigious honors and has consistently been named one of “America’s Top Doctors.”.

Bewwang@hs.uci.edu

Received date: 29-11-2022 | Accepted date: 01-12-2022 | Published date: 08-05-2023

Role of Diabetic Educator in screening prevention and management of Diabetes and the Impact of Staff Nurses on Improving Patient Outcomes

Raghda A Hamid

King Saud Medical City, Saudi Arabia

Background: The Role of the Diabetes Nurse Educator in King Saud Medical City is a new approach to improving the quality of Staff education, the CDE has some specific responsibilities in the evaluation of each Staff Nurses in Particular area, we have a skilled in this teaching-learning process and have a good background and understanding of diabetes, Proper care and good management from nurse's side will reduce the frequency of office visits, and hospitalization.

Objective: The goal of develop the New role of Diabetes Nurse Educator in King Saud Medical City was to determine the effectiveness of education provided by CDEs to our Staff Nurses in particular area

Location/Sitting: King Saud Medical City-Riyadh, Endocrinology Department –Diabetes Division outpatient clinic and In-patient in General Hospital.

Results:in King Saud Medical City the Diabetes Educators developed and implement educational programs for staff Nurses in a variety of settings, including:

- General Nursing orientation program (GNO) for the New Hires
- Unit Continuous Nurse Education (UCNE) in clinical areas
- Hospital Continuous Nurse Education (HCNE)
- Grand rounds and In-service education
- Provide clinical resource and consultation to staff Nurses collaborating with Endocrine team.
- Works collaboratively with other health professionals.

Conclusion: The CDE plays an integral role within the prevention, diagnosis and adequate management of diabetes. The specialist role can increase skills, knowledge and confidence, as well as support and empower the staff nurses who deal with diabetic patient and reduce the chances of developing further health complications, however; the roles and responsibilities of the nursing team relating to diabetes care include: Prevention advice, using behavior change and health coaching techniques, Screening, prevention.

Biography

Ragdah A Hamid has completed her Bachelor's degree in Nursing from The University of Jordan and her Post Graduation Diploma in Diabetes Primary Care from St. Geroge University School of Medicine. She is the Diabetes Nurse Educator in King Saud Medical City, Riyadh.

raghadnazal3@gmail.com