Neuroendocrinology and Pituitary

NEUROENDOCRINE & PITUITARY PATHOLOGIES

Hypophisitis in Patients with and Without Autoimmune Rheumatological Disease

MARLON VLADIMIR VÁZQUEZ AGUIRRE, FELLOW IN TRAINING NEUROENDOCRINOLOGY[1],
Juan Pablo Godoy-Alonso, MD[2], Germán González-de la Cruz, MD[2], Andrea Rocha-Haro, MD[2], Karla Krystel Ordaz-Candelario, MD[2], Juan Balbuena-Álvarez, MD[2], Angélica Martínez-Jiménez, MD[2], Romina Flores-Cárdenas, MD[2], Paola Roldan-Sarmiento, MD[3], Miguel Ángel Gómez-Sámano, MD[3],
Francisco Javier Gómez-Pérez, MD[3], Jesús Higuera-Calleja, MD[4], Andrea Hinojosa-Azaola, MD[5], Eduardo Martin-Nares, MD[5], Daniel Cuevas-Ramos, MD, MsSC, PhD[2].
[1]INSTITUTO NACIONAL DE CIENCIAS MEDICAS Y NUTRICION SALVADOR ZUBIRAN, CIUDAD DE MEXICO, Mexico, [2]Neuroendocrinology unit, Endocrinology Department, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico City, Mexico, [3]Endocrinology unit, Endocrinology Department, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico City, Mexico, [4]Radiology Department, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico City, Mexico, [5]Immunology and Rheumatology Department, Instituto Nacional de Ciencias Médicas y Nutrición Salvador Zubirán, Mexico City, Mexico.

SUN-304

Background: Hypophysitis is an inflammatory process of the pituitary gland with different origins. Infundibulum may be also involved, called infundibulum-hypophysitis. Sometimes, enlargement of pituitary gland causes mass effect and anterior or posterior hormonal dysfunction, including hypopituitarism, and diabetes insipidus (DI), respectively. Hypophysitis is a rare autoimmune disease, however, the number of cases have been recently increasing due to higher detection related with more magnetic resonance imaging (MRI) studies. In addition, hypophysitis may be related with autoimmune rheumatologic disease (ARD) such as generalized lupus erythematosus (GLE), granulomatosis with polyangeitis (GPA), IgG4-related disease, and rheumatoid arthritis (RA). **Aim:** to compare the clinical and biochemical findings among patients with hypophysitis grouped depending on the presence of coexistent ARD activity. **Methodology:** it is a comparative and cross-sectional study. We registered all data from cases followed-up in Neuroendocrinology and Rheumatology units, from January 1987 to July 2019. **Results:** 24 patients showed confirmed diagnosis of hypophysitis. Majority of them (n=17, 71%) do not have coexistent diagnosis of ARD. However, 7 cases (29%) presented pituitary involvement with coexistent activity of GPA (n=4, 17%), GLE (n=1, 4%), RA (n=1, 4%) and IgG4-related disease (n=1, 4%). Female gender predominate in hypophysitis cases with and without ARD (p=0.9). Interestingly, age of hypophysitis diagnosis was significantly younger in cases without (38±14) vs. with (49±5) ARD (p=0.01). MRI results showed similar and typical findings related with hypophysitis independently of the presence of ARD. Hypopituitarism was present in the majority of cases, however, none of cases with hypophysitis and ARD showed hypogonadism (p=0.02). DI was present in 15 patients (63%), three of them with ARD (all with GPA). All cases received only medical therapy (i.e., glucocorticoids, rituximab, or azathioprine). Surgery or radiotherapy was not necessary in any case. **Conclusions:** Almost a 30% of cases with hypophysitis may have coexistent ARD. Pituitary function should be evaluated in cases with previous ARD diagnosis. However, hypogonadism was not present in cases with ARD and hypophysitis. Patients with ARD presented hypophysitis at older age. The remaining clinical and radiological data were similar between groups.

References: 1) Clinical Diabetes and Endocrinology. December 2016;2(1). 2) Clin Rheumatol. 2019 Aug 24. doi: 10.1007/s10067-019-04735-7

Cardiovascular Endocrinology

ENDOCRINE HYPERTENSION AND ALDOSTERONE EXCESS

Usefulness of Contralateral Suppression in Adrenal Venous Sampling to Define Lateralization in Primary Aldosteronism

Thaís C Freitas, MD[1], Ana Alice Wolf Maciel, MD[1], Leticia Assis Pereira Vilela, MD[1], Marcela Rassi-Cruz, MD[1], Janaina Petenuci, MD[1], Maria Adelaide A Pereira, PhD[1], Giovanio V Silva, MD[2], Andrea P Abreu, PhD[2], Fernando Yamauchi, MD[3], Vitor Srougi, MD[4], Fabio Y. Tanno, MD[4], Jose L Chambo, PhD[4], Ana Claudia Latronico, PhD[1], Luiz A Bortolotto, PhD[5], Luciano Drager, MD[5], Bruna Pilan, MD[3], Aline C.B. Cavalcante, MD[3], Carnevale Francisco, MD[3], Maria Candida B v Fragoso, PhD[1], Berenice B. Mendonca, PhD[1], Madson Q. Almeida, MD[1].
[1]Unidade de Suprarrenal, Laboratório de Hormônios e Genética Molecular LIM/42, Serviço de Endocrinologia e Metabologia, Hospital das Clínicas, Faculdade de Medicina da Universidade de São Paulo, São Paulo, Brazil, [2]Unidade de Hipertensão, Serviço de Nefrologia, Hospital das Clínicas, Faculdade de Medicina da Universidade de São Paulo, São Paulo, Brazil, [3]Instituto de Radiologia InRAD, Hospital das Clínicas, Faculdade de Medicina da Universidade de São Paulo, São Paulo, Brazil, [4]Serviço Urologia, Hospital das Clínicas, Faculdade de Medicina da Universidade de São Paulo, São Paulo, Brazil, [5]Unidade de Hipertensão, Instituto do Coração (InCOR), Faculdade de Medicina da Universidade de São Paulo, São Paulo, Brazil.

SAT-560

Primary aldosteronism (PA) is the most common cause of endocrine hypertension. PA subtypes include bilateral hyperplasia and unilateral PA, typically aldosterone-producing adenomas. Adrenal venous (AV) sampling (AVS) is a key step to define PA subtype and guide PA management. According current PA guidelines, most PA patients should undergo AVS, which is a challenging procedure, especially in terms of successfully cannulating the right AV. The aim of this study was to report a single tertiary center experience with AVS in PA patients. We retrospectively evaluated 84 AVS from 1984 to 2019. Sequential AVS was performed by an experienced interventional radiologist. AV and inferior vena cava (IVC) samples were obtained under cosyntropin continuous infusion. Successful catheterization was defined by a selectivity index [SI= AV/IVC cortisol (C) concentrations] ≥5. Unilateral disease was defined by a lateralization index [LI= aldosterone (A)/C ratio