## EVALUATION OF POSTMENOPAUSAL HYPERANDROGENISM. CASE REPORT.

Tomé, M; Martínez de Pinillos, G;; García, F; M; Cuéllar, E.A García de Quirós, J.M; Fernández Peña, I; Cózar, M.V.

UGC Endocrinología y Nutrición. AGS Sur de Sevilla.

## INTRODUCTION

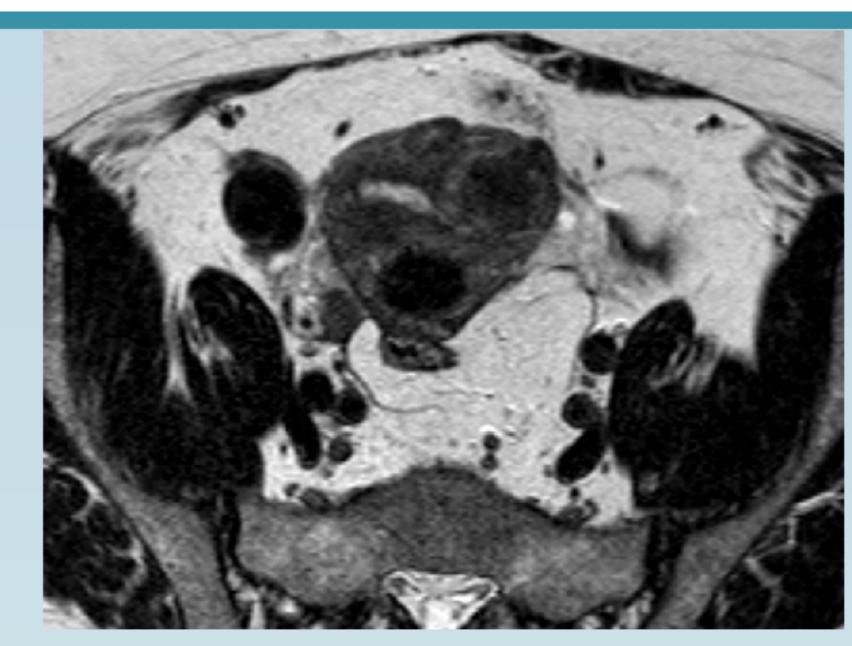
Evaluation of postmenopausal hyperandrogenism may be a challenge for physicians as it is necessary to exclude the presence of the relatively rare but potentially life-threatening underlying tumorous causes. We report the case of a postmenopausal woman who presented with clinical and biochemical hyperandrogenism

## **CASE REPORT**

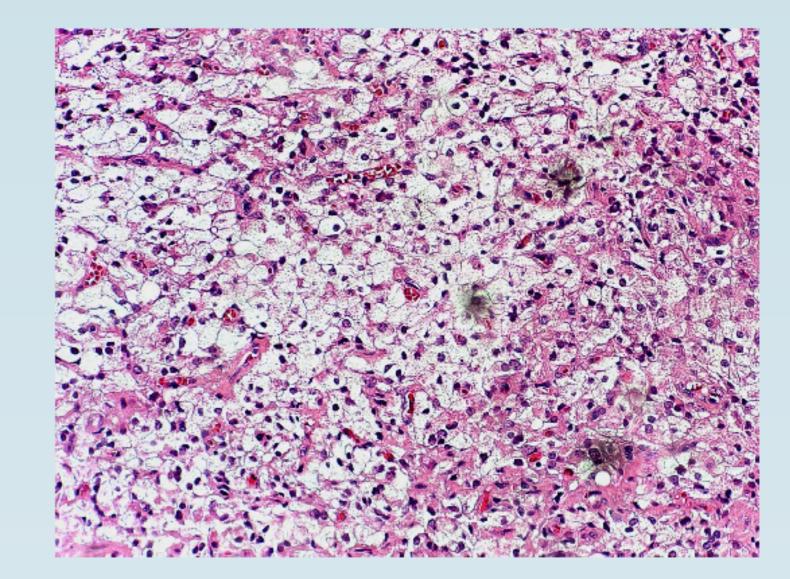
- \* We present the case of a 65 year-old woman being followed at our clinic because of mild hypothyroidism.
- ❖ At inspection we observed severe hirsutism (20 points on Ferriman-Gallway scale).
- ❖Patient referred increased facial hair in the last year. No other signs such as baldness or voice changes were detected. She referred regular menses until menopause at the age of 49.
- ❖Total testosterone levels were increased (2.28 ng/ml) with normal concentration of adrenal androgens (DHEA-S) in several determinations (Table 1) and HbA1c in pre-diabetes range.
- Metformin was iniciated (suspicion of ovary hyperthecosis).
- ❖ Vaginal US: no alterations
- CT-Scan: 2 cm lesion in left adrenal gland suggestive of adrenal adenoma.
- ❖ Abdominal MRI showed a nodule of 2.2 cm on the right ovary suggestive of mioma and less likely of an ovary tumor (Picture 1).
- ❖Despite the presence of an adrenal adenoma, suspecting ovary hyperandrogenism we decided to perform laparoscopic bilateral oophorectomy.
- ❖An steroid cell tumor of 1.5 cm was detected on the right ovary on histological evaluation.
- ❖ After surgery, testosterone levels returned to normal and our patient has observed improvement in hirsutism and other signs of virilization.

	SEPTIEMBRE 2011	FEBRERO 2012		JUNIO 2012	NOVIEMBRE 2012		SEPTIEMBRE 2013
FSH (U/L)	29,44	34,65	INTRODUCCIÓN DE	31,62	30,94	I N Q M A Y O V Ú R Q O C I C 3 Ó A N	40,9
LH (U/L)	10,91	20,1		11,45	13,13		20,85
17-BETA-ESTRADIOL (pg/ml)	50,32	39,01		23,25	24,21		5
TESTOSTERONA TOTAL (ng/ml)	1,72	2,28		1,40	1,43		0,06
DHEA-S (μg/ml) (VN: 0,19-2,05)		0,95		0,69	0,73		0,28
17-OH-PROGESTERONA (ng/ml) (VN: 0,2-0,9)		0,38		0,08	0,22		0,68
DELTA-4-ANDROSTENDIONA (ng/ml) (VN: 0,35-2,49)		1,20		1,04	0,95		1,67
GLUCOSE (mg/dl)		106		104	104		105
HBA1C(%)		6,4		6,1	6,2		5,9
INSULINEMIA (μU/ml) (VN: 3-17)		14,7		11			
(HOMA)		4,4		2,9			

Table 1:Laboratory findings



Picture 1. MRI Abdominal



Picture 2: Histological study

## CONCLUSIONS

- ❖Hyperandrogenism after menopause is a rare condition that needs careful evaluation in order not to misdiagnose an underlying androgen-secreting tumor.
- Clinical phenotype and symptom onset do not reliably permit discrimination between tumorous and nontumorous causes, but may help to guide the diagnosis. Imaging tests not always show the origin of hyperandrogenism and occasionally may mislead the diagnosis.



