

23 year old pregnant woman with possible pituitary mass

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Katie Stanley, MD

HPI

- 23 yo G6P3 at 29 wks with severe HA and vision changes
- Mild intermittent HA x 1 wk, then acute worsening on the morning of presentation
- Vision changes described as blurred vision off and on for 1 week, difficulty focusing, possible diplopia, bright flashing light in L superior temporal field
- Lip and left hand numbness
- OSH MRI brain showed possible pituitary mass

Review of Systems

- Constitutional: Negative for fever, appetite change, cold intolerance. Positive for diaphoresis and fatigue.
- Eyes: Positive for visual change. Negative for photophobia.
- Respiratory: Negative.
- Cardiovascular: Negative.
- Gastrointestinal: Negative for nausea, vomiting, abdominal pain and constipation.
- Genitourinary: Positive for irregular periods since menarche, sometimes oligomenorrhea, sometimes polymenorrhea, difficulty getting pregnant with 2nd and 3rd children. Galactorrhea x 2 mos.
- Musculoskeletal: Negative.
- Skin: Negative for dry skin.
- Neurological: Positive for dizziness and lightheadedness starting when HA did, numbness, and headaches.
- Hematological: Negative.
- Psychiatric/Behavioral: Emotional lability

Other History

- PMH
 - Asthma
 - 2 miscarriages
- Home Medications
 - PNV
- Family History
 - No pituitary tumors, parathyroid tumors/Ca issues/neck surgery, no pancreatic tumors
- Social History
 - In relationship with the father, former smoker, no EtOH or drugs

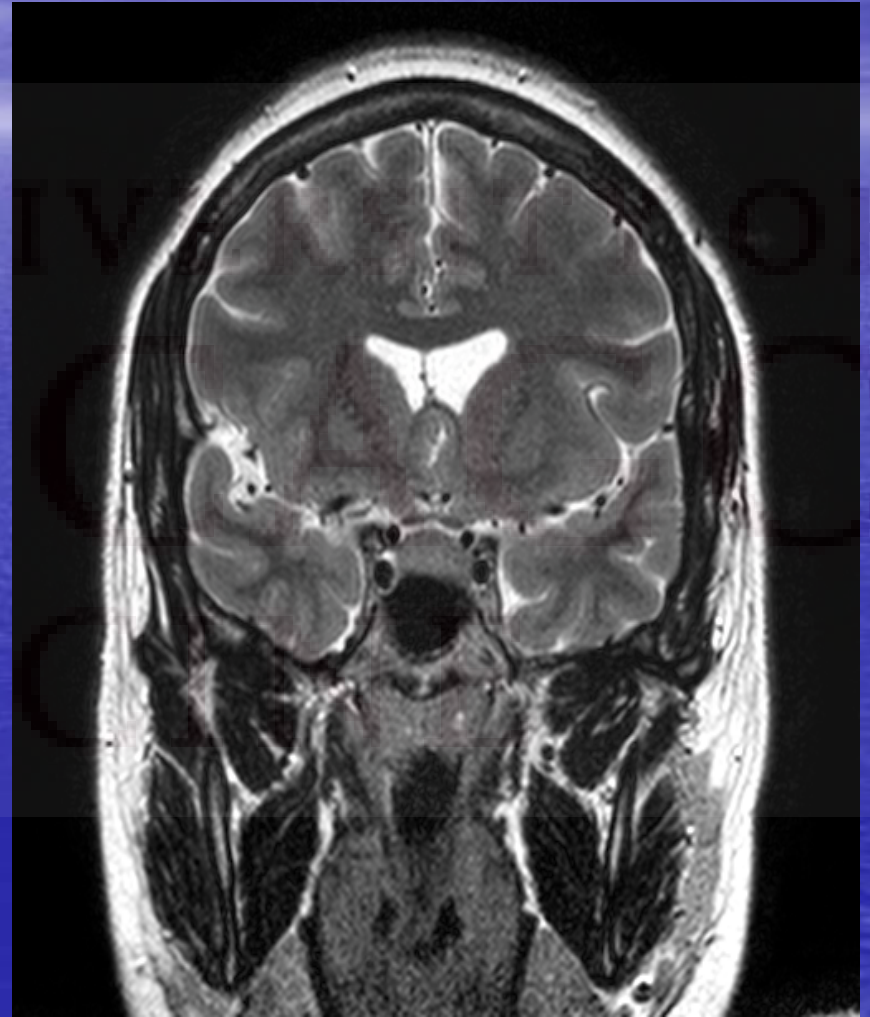
Physical Exam

- Vitals: 116 kg, 154.9 cm, AF, HR 77, RR 20, BP 102/52
- Constitutional: Well appearing, no distress
- HEENT: NC/AT, OP clear
- Eyes: PEERL, EOMI but reported diplopia on left lateral gaze, visual fields intact to confrontation
- Neck: Supple, no thyromegaly
- Pulmonary: CTAB
- CV: RRR, no murmurs, no edema
- Abdomen: Gravid, non-tender
- Breasts: galactorrhea expressed bilaterally
- Neurologic: A+O x 3, 5/5 strength throughout, 2+ reflexes throughout, pinprick and temperature sensation decreased from left elbow down through medial aspect of arm to 4th and 5th digits
- Skin: Warm and dry

Labs

- CBC: WBC 11.3, Hgb 11.7, Hct 35.4, Plts 215
- CMP: Na 137, K 3.3, Cl 104, HCO₃ 20, BUN 5, Cr 0.4, Glu 125, Ca 8.6, Prot 5.8, Alb 3.2, Bili 0.2, AST 10, ALT 11, Alk phos 41
- PRL 460.9
- IGF-1 234
- LH <0.1, FSH 0.1, E2 14805
- ACTH 40.8, cortisol 40.0
- TSH 1.22, FT4 0.80, FT3 270

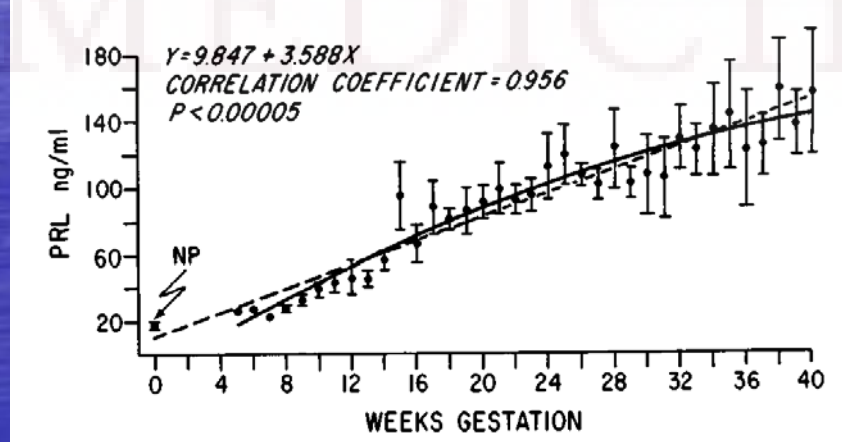
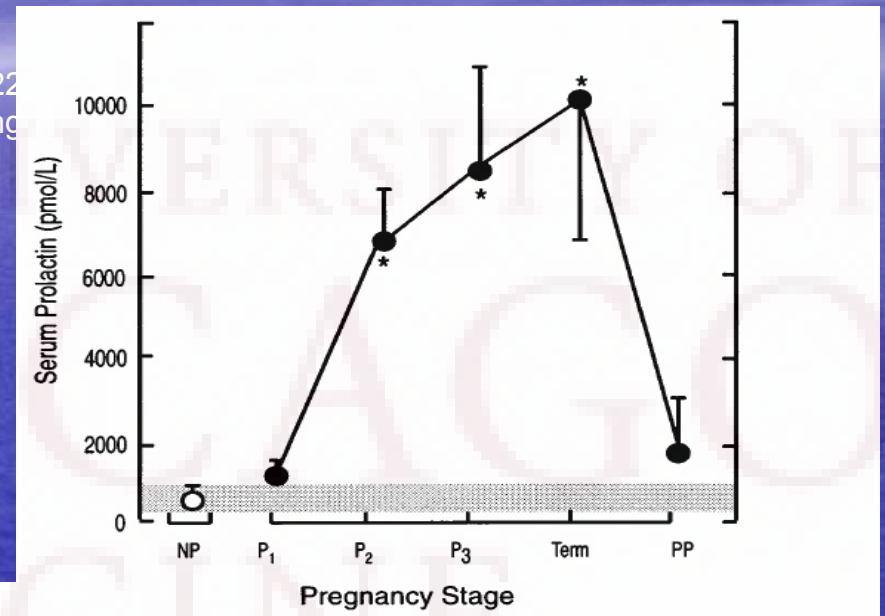
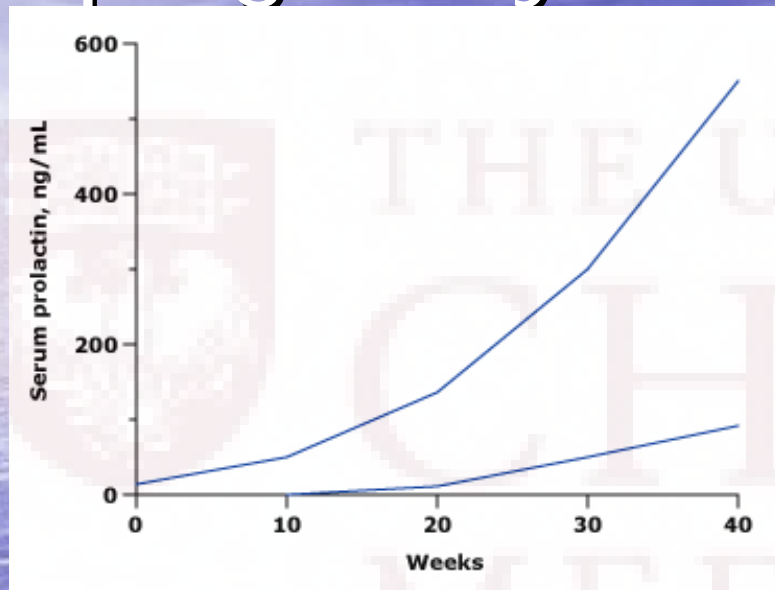
MRI



Hospital Course

- HA resolved with Fioricet on 1st day of admission and did not recur during 3 days of admission
- Vision changes resolved with HA although still blurry when looked quickly from one place to another
- Numbness resolved
- Confrontation testing nl per ophtho, formal VF not obtained

What is the range of normal PRL in pregnancy?



How big is too big?

Pituitary gland in pregnancy

TABLE I

Patients' Characteristics and Pituitary Gland Measurements (mean \pm SD)

Group	Number	Age (years)	Gestational Age (weeks)	Pituitary Dimensions			Pituitary Volume (mm ³)
				Vertical (mm)	Transversal (mm)	Anterior-Posterior (mm)	
Control	20	23 \pm 1	—	6.0 \pm 0.6	12.4 \pm 1.1	7.9 \pm 1.5	300 \pm 60
I	10	19 \pm 2	8.5 \pm 2	6.6 \pm 1.1	13.4 \pm 1.4	9.2 \pm 1.1	437 \pm 90*
II	11	21 \pm 4	21.3 \pm 3	7.5 \pm 1.0	13.8 \pm 2.2	10.3 \pm 1.4	534 \pm 124*
III	11	20 \pm 3	36.5 \pm 3	8.8 \pm 0.8*	14.8 \pm 1.3*	10.8 \pm 1.0*	708 \pm 123*†

* Significant difference when compared with control ($p < 0.001$).

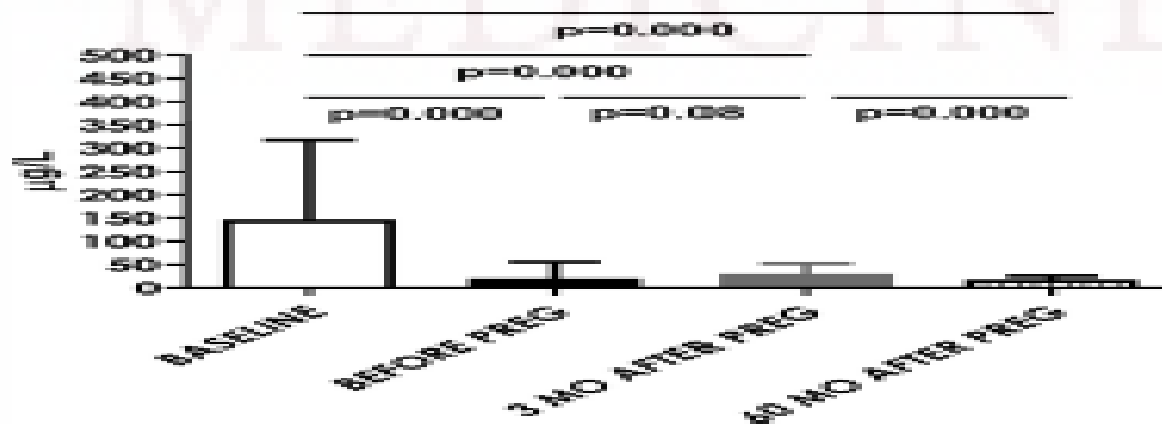
† Significant difference when compared with Group II ($p < 0.01$).

Endocrine Society Guidelines

- Discontinue dopamine agonist as soon as pregnancy confirmed
- No routine PRL or MRI during pregnancy
- Visual fields and MRI w/o gadolinium if severe HA or visual changes
- Bromocriptine if have symptomatic growth during pregnancy
 - 2.6% with microprolactinoma
 - 31% with macroprolactinoma

Prolactinoma ↔ Pregnancy

- What are chances of spontaneous pregnancy with a prolactinoma?
 - 12/58 (20%) women pregnant w/o tx
 - Mean time to pregnancy 3 years
- Remission after pregnancy?
 - 68% txed before do not need retx



References

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