

臺北醫學大學 50 週年慶

眼科學最近之發展 國際學術研討會

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## **Ophthalmic Manifestation of Pituitary Adenoma**

An-Guor Wang, M.D. PhD 王安國

## Ophthalmic Manifestation of Pituitary adenoma

王安國  
台北榮民總醫院 眼科部  
陽明大學醫學院

### 1. Who is your patient?



### 2. What complaint?

- 一週來右眼視力逐漸模糊  
眼球轉動會痛
- 星期四早上起來  
發現右眼看不到
- 兩眼都有視力模糊的現象  
特別是外側
- 兩眼視力逐漸模糊  
大概有一兩個月

### Taipei VGH Pituitary Survey (TVPS)

- A retrospective analysis
- 1999-2007 patients with pathologically- proven pituitary tumor
- To analyze the visual outcome including visual acuity and visual field change

#### Inclusion criteria

- Pathologically-proven pituitary adenoma
- Receive primary operation in our hospital
- Complete record of preoperative and postoperative best corrected visual acuity (BCVA)
- Follow up longer than 3 months
- No associating ocular disorders which cause visual impairment

#### Exclusion criteria

- No proven pathologic report of pituitary adenoma
- History of sellar surgery or other treatment facilities in other hospital
- Incomplete record of best corrected visual acuity
- Follow up less than 3 months
- Associated with ocular disorders which may impair vision

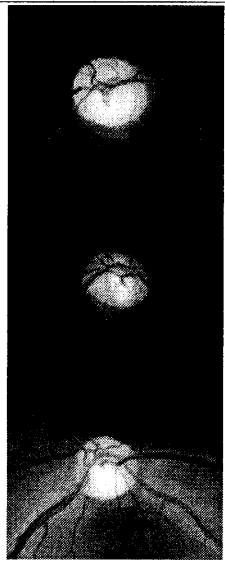
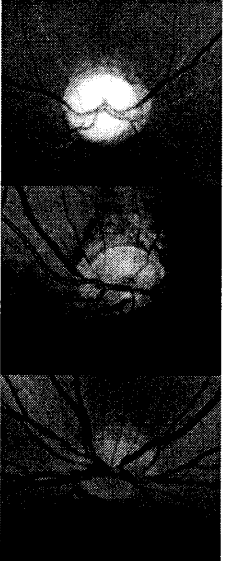
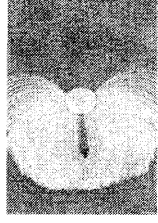

### Clinical profiles - TVPS

- Mean age: 47 ± 14.9 years (15~75 yrs)
- Male: female= 7:5 (Male 58%)
- Pathologic subtype
  - Gonadotrophic adenoma 45.8%
  - Pleurihormonal adenoma 20.8%
  - Lactotrophic adenoma 12.5%
  - Corticotrophic adenoma 4.1%
  - Null cell adenoma 8.3%
  - Unclassifiable 8.3%

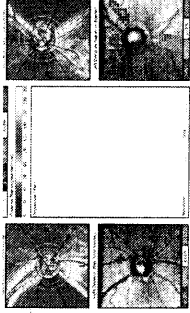
### Pituitary tumor

Type of adenoma	Secretion	Staining	Manifestation
Corticotrophic	ACTH, Pro-opiomelanocortin (POMC)	basophilic	Cushing's disease
Somatotrophic	GH	acidophilic	Acromegaly
Thyrotrophic	TSH	basophilic	Occasionally hyperthyroidism
Gonadotrophic	LH, FSH	basophilic	Usually doesn't cause symptoms
Lactotrophic / prolactinoma	Prolactin	acidophilic	Galactorrhea, hypogonadism, amenorrhea, infertility, impotence
Null cell adenoma	none	May stain positive for synaptophysin	

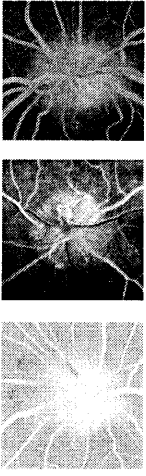
3. Fundus feature?



4. NF analysis?



5. FAG finding?





### Visual outcome TVPS

	VA (logMAR)	VF mean defect (MD)
Preoperative	0.52 ± 0.66	11.67 ± 7.86 dB
Postoperative	0.24 ± 0.51	7.43 ± 7.80 dB
<i>p-value*</i>	0.006	0.024

\* *paired T test*

### Summary

- Gonadotrophic adenoma is the most common type
- Band atrophy with binasal NF loss is typical
- Superior temporal defect may help early detection of this tumor
- Surgical intervention may result in significant improvement both in VA and VF

Thank you for your attention!