

# Diabetes Insipidus, a neuroendocrine complication of Behcet's

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## Introduction

- **Behcet's Syndrome (BS)** is a chronic inflammatory disease characterized by systemic involvement of blood vessels of all sizes on both arterial and venous circulation resulting in **recurrent oral and genital ulcers**, skin lesions, neurologic and ocular involvement.
- Rare **neuroendocrine manifestations** such as **central Diabetes Insipidus (DI)** can be associated with BS.
- The **posterior infundibulo-hypophysitis**, causing DI, has been commonly reported in association with **systemic inflammatory/autoimmune disorders**.
- There are only 4 reported patients with **BS presenting with DI**

## Case Presentation

- **26-year-old African American female** with a history of BS diagnosed in 2006 with **recurrent oral and genital ulcerations**.
- Three weeks prior patient had **flu vaccine** and developed acute symptoms including **malaise, dizziness, severe polyuria** and **polydipsia** with requests for iced water.
- On physical examination she had multiple **oral and genital aphthae**.
- Complete evaluation of **anterior pituitary hormone** function tests including serum TSH, FT4, FSH, LH, estradiol, prolactin, IGF-1, and ACTH stimulation test were **unremarkable**.
- MRI of the brain was suggestive of **possible thickening of the pituitary stalk**, but otherwise normal.
- Patient was started on **DDAVP, 0.1 mg twice daily** with **complete resolution of symptoms** associated with DI within 6 weeks.

Serum sodium	150 mEq/L
Urine specific gravity	1.003
Urine osmolality	126 mOsm/kg
Urine output	5600 mL/12 hours

Table 1: Pertinent DI lab values

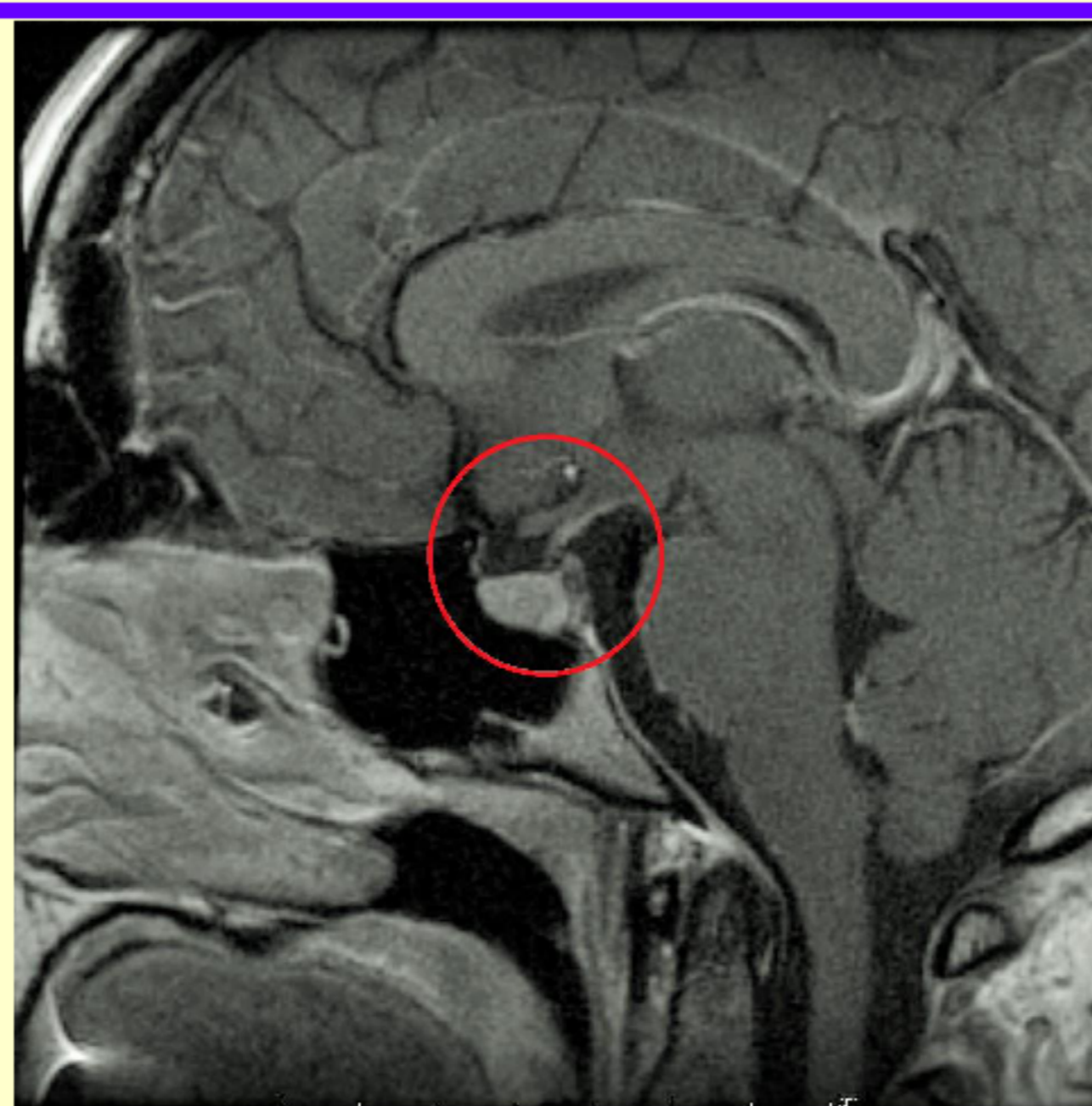


Image 1: MRI Brain with thickening of the pituitary stalk



Image 2: Oral ulceration of Behcet's

## Discussion

- It is important to **consider Neuro-Behcet's Syndrome (NBS)** in a neuroendocrine patient who has recurrent oral or genital ulcers or other systemic features of BS.
- **Central DI** is one of the rarely reported neuroendocrine **manifestations of BS**
- **In contrast** with all prior cases reported, our patient's central DI had **self-limiting course** with complete resolution of symptoms.
- To date, other than skin, oral and genital mucosa involvement, **no NBS** reported **in association with influenza vaccination**.
- It is not known if patients with BS should **receive a flu vaccine**.

## CONCLUSIONS

- The findings from this **rare case** adds further evidence that **Behcet's** should be considered in the **differential diagnosis of central DI**.
- **Influenza vaccination** may have the potential for the onset of **BS and/or flare** of its symptoms in patients not on immunosuppressive therapy.

## References

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