

# Case Report

## Pituitary Macroadenoma Presenting with Multiple Psychiatric Complications

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### ABSTRACT

We report a case of pituitary macroadenoma with multiple physical and psychiatric complications, which posed a significant diagnostic dilemma and management challenge for the treating teams of neurosurgery, endocrinology and psychiatry. A pragmatic approach comprising of interdisciplinary collaboration resulted in satisfactory management of the case.

**Key words:** *Depression, opioid, pituitary macroadenoma*

### INTRODUCTION

Patients with pituitary diseases present with many psychiatric symptoms such as body image disturbances, depression and adjustment disorders.<sup>[1]</sup> Due to hormonal dysregulation, diabetes mellitus (DM), hyper or hypothyroidism, acromegaly, hyperprolactinemia are common. In these patients, diagnostic and management problems may ensue due to difficulty in distinguishing symptoms of endocrine and associated physical disorders from those of psychogenic origin.


### CASE REPORT

Ms. R., a 17-year-old, unmarried girl from lower socioeconomic status, Hindu nuclear family with no past or family history of psychiatric illness was referred from endocrinology ward with complaints of repeated demands for injectable analgesics for last 2 weeks.

History revealed that around 4 years back, she started gaining height rapidly, developed masculine features and developed continuous, throbbing headache. A magnetic resonance imaging (MRI) (brain) revealed a pituitary macroadenoma; which was surgically resected and thyroxin 150 µg/day and prednisolone 7.5 mg/day was started. After 2 months, she had also developed DM and was started on oral hypoglycemic drugs. She had stopped going to school because of embarrassment due to change in her physical appearance.

About 1 year back, headache reappeared; repeat MRI revealed a residual tumor which was treated with radiotherapy for 25 days. However, there was no relief in her symptoms; rather she reported an increase in severity and frequency of headache. Simultaneously, family members noticed that she would remain sad, feel frustrated and ascribe her suffering to past sinful deeds. Her interest in previously pleasurable activities like watching TV and interaction with friends and family members decreased. She had lost hope of getting cured and repeatedly expressed wishes to die; would ask for “poison injection” so as to get relief from her suffering. She had difficulty in falling asleep and poor appetite.

Again, she was hospitalized for uncontrolled DM and persistent headache. A repeat MRI revealed

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residual tumor with mild hydrocephalus. She was started on injection octreotide, a somatostatin analog, for acromegaly (not for a headache) with which she felt relief in headache. She started demanding injection frequently and would get 5-6 injections of octreotide/day for headache. About a month after the hospitalization, she was reoperated and was shifted back to endocrinology ward after a week. However, she continued to complain of headache and was advised SOS injection tramadol with which she reported instantaneous relief and slept off. Next day onwards, she frequently demanded injection and had intense, uncontrollable desire for these. She would scream with pain and cry whole day except when she was asleep. She would tie a cloth around her head to get relief from headache, would ask her mother to thump her head, or she would do that herself. She would frequently go to a nursing desk and plead for injection. If denied, she would become aggressive, abusive and sometimes assaultive. Within 4 days, she started receiving 5-6 injections of tramadol/day in addition to other oral analgesics.

Her psychiatric diagnoses were severe depressive episode without psychotic symptoms (F32.2), elaboration of physical symptoms for psychological reasons (F68.0) and mental and behavioural disorders due to use of opioids, harmful use (F11.1).<sup>[2]</sup> She was started on mirtazapine that was gradually increased to 30 mg/d. She was detoxified with tapering dosage of oral tramadol starting from an equivalent dose of 600 mg/day. Regular sessions were held in which she was encouraged to verbalize and discuss feelings and concerns about her illness. A structured daily routine was prepared, which included performing activities of daily living at scheduled time, engaging in group and recreational activities. During these discussions, positive reinforcers like access to the computer for internet surfing were used to increase her compliance with a structured routine by making them contingent with same. Future plans regarding studies were discussed with her and family. Her depressive symptoms improved significantly by 6 weeks and tramadol was tapered and stopped in about 3 weeks. Over next 2-3 weeks, she gradually stopped demanding injections, started taking interest in recreational activities in the ward. She was discharged after 2 months. Her demand for injections and attention-seeking behaviour associated with pain had significantly reduced.

## DISCUSSION

Ms. R. had presented to the psychiatry team with considerable diagnostic and management challenges. Her endocrine and intracranial diseases, started in early adolescence, had manifested in several physical

symptoms, and significant masculine changes in body, and facial appearance in the form of acromegaly. This had resulted in significant psychological distress manifesting as severe depression. She was unable to feel and verbalized her psychological distress, and instead she somatized same as pain symptoms like headache and repeated demands for injections for its relief. The irreversibility of associated bodily changes is known to induce highly individualized affective responses, body image disturbances and lowered self-esteem that may persist or even worsen upon proper endocrine treatment.<sup>[3]</sup> In a series of 17 patients with acromegaly, (33.33%) subjects exhibited psychiatric morbidity on the General Health Questionnaire; five of these had an International Classification of Diseases-10 diagnosis.<sup>[4]</sup> She also displayed rapidly developing harmful drug-seeking behavior. A review of studies conducted in tertiary care pain clinics noted that the prevalence of such behavior ranged from 3% to 19% or more.<sup>[5]</sup> The characteristics of patients more prone to develop dependence on prescribed opioids are extremes of age, past maladjustment or legal problems and history of comorbid psychiatric illness.<sup>[6]</sup> In view of the presence of poor premorbid coping abilities, she had a considerable risk for developing drug dependence.

## CONCLUSION

This case highlights that long-standing endocrine disorders, presenting with multiple physical diseases are often associated with varied psychiatric symptoms. Careful selection of patients while prescribing opioid for pain management is important due to the possibility of developing abuse and dependence. While managing such patients, both pharmacological and psychological interventions play a significant role. A pragmatic approach comprising of interdisciplinary collaboration is important for management of these cases.

## REFERENCES

1. Sonino N, Ruini C, Navarrini C, Ottolini F, Sirri L, Paoletta A, *et al.* Psychosocial impairment in patients treated for pituitary disease: A controlled study. *Clin Endocrinol (Oxf)* 2007;67:719-26.
2. World Health Organization. *The ICD-10 Classification of Mental and Behavioural Disorders. Clinical Descriptions and Diagnostic Guidelines.* Geneva: World Health Organization; 1991.
3. Pantanetti P, Sonino N, Arnaldi G, Boscaro M. Self image and quality of life in acromegaly. *Pituitary* 2002;5:17-9.
4. Mattoo SK, Bhansali AK, Gupta N, Grover S, Malhotra R. Psychosocial morbidity in acromegaly: A study from India. *Endocrine* 2008;34:17-22.
5. Fishbain DA, Rosomoff HL, Rosomoff RS. Drug abuse, dependence, and addiction in chronic pain patients.

Clin J Pain 1992;8:77-85.

- Ives TJ, Chelminski PR, Hammett-Stabler CA, Malone RM, Perhac JS, Potisek NM, *et al.* Predictors of opioid misuse in patients with chronic pain: A prospective cohort study. *BMC Health Serv Res* 2006;6:46.

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