Quality of life in Sheehan Syndrome

Sir,

Sheehan syndrome (SS) results from ischaemic necrosis of pituitary gland due to severe post-partum haemorrhage. Traditionally, they are treated with glucocorticoids, levothyroxine, calcium and vitamin D supplementation and frequently with gonadal replacements. Although adult growth hormone therapy may be indicated; most patients are unable to afford this. Subjects with SS frequently suffer from lethargy, low mood, sexual dysfunction, poor social interaction and cognitive function and poor quality of life (QoL).[1] However, studies objectively assessing QoL in SS are scarce. Available information is predominantly based on studies in panhypopituitarism and in adults with isolated GHD.[2] In this context, we conducted this study to assess QoL in SS objectively.

This observational study was conducted in subjects aged ≥18 years with diagnosed SS (n = 32). Study was approved by Institutional Ethics Committee. SS was diagnosed by standard criteria.[1] Subjects with hypopituitarism due to causes other than SS or any other chronic disease, e.g., diabetes, chronic kidney disease and chronic lung disease, were excluded. Subjects were on regular replacement as above but none were on GH treatment. Twenty-three subjects were on gonadal replacements. All participants had panhypopituitarism. None had diabetes insipidus. IGF-1 level was below the age and sex-specific normative value in all. Twenty-one (65.6%) had empty sella in MRI and 11 (34.4%) had partial empty sella. Thirty healthy women of same age range (21 pre-menopausal and 9 post-menopausal) and from the same socio-economic background were included as control. Details of SS cohort are available in our earlier publication.[3]

We used WHOQOL-BREF questionnaire (validated Bengali version) which is an approved short 26-item version of WHOQOL-100. This questionnaire assesses ones' perceptions of their status in life in the context of culture and value systems in which they live and in relation to their goals, expectations, standards and concerns.[4] Participants reported ratings on a 5-point Likert scale in 4 domains: physical, psychological, environment and social relationships. Two individual items related to overall perception of QoL and perception of health were also recorded. Permission for using WHOQOL-BREF was obtained. SPSS (Version 21.0) was used for data analysis.

Table 1: Comparison of overall and individual domains of QoL

Parameters	Sheehan syndrome (N = 32)	Controls (N = 30)	Significance
Overall QoL	3.5 (3-4)	3 (3-3)	NS
Overall health	3 (2-4)	3 (3-4)	NS
Physical health (D1)	11 (9-13)	14(12-15)	<0.001
Psychological health (D2)	11.5 (10-13)	15 (12-15)	<0.001
Social Relationship (D3)	12 (11-13)	13 (12-15)	0.085
Environmental Health (D4)	13.5 (12-15)	13 (12-13)	0.09

Data presented as median (IQR). *P* value calculated by Mann–Whitney *U* test

The mean age (±SD) of patients with SS and controls was 39.9 (±8.6) and 36.2 (±6.8) years, respectively. The interval between inciting event to diagnosis was 8.3 (±5.1) years. Overall, QoL and overall health were not statistically different between SS and controls. When individual domains were compared between groups, physical and psychological health was significantly low in SS ($P < 0.001$ for both), but no difference was observed in social and environmental health [Table 1].

Adults with childhood onset multiple pituitary hormone deficiency had low QoL in all domains.[5] QoL was found low in SS in comparison to non-functional pituitary adenoma.[6] Improved QoL was also found in SS after 1 year of hormone replacement without GH.[7] We found no significant difference for overall QoL and overall health compared to controls but physical and psychological health was significantly worse in SS.

It may be noted that SS subjects were not receiving GH. This could be one of the reasons for poor QoL. If adult GH deficiency was treated, it might have changed the result but therapy is required for an indefinite period. In the real world scenario, GH therapy is not possible (despite it being indicated) for most of subjects living in an economically challenged world to afford GH therapy indefinitely.

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Conflicts of interest

There are no conflicts of interest.

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