Anxiety in Benign Fasciculation Syndrome

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OBJECTIVE

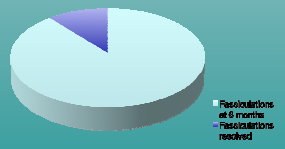
To study the prevalence and intensity of anxiety in patients with benign fasciculation syndrome (BFS) and its correlation with fasciculation duration.

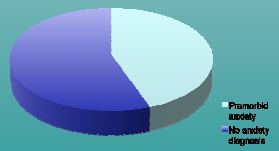
BACKGROUND

Despite the favorable natural history of benign fasciculation syndrome (BFS), patients frequently appear distressed about their disorder. Blexrud[1] reported that a large percentage of patients with BFS were medical professionals, implying that awareness of fasciculation significance increases anxiety and the motivation to seek medical care. However, the psychological correlates of BFS have not been systematically studied. We postulate that awareness of fasciculation significance produces anxiety, which may perpetuate symptoms.

Table 1. Summary of preliminary data.

Gender	77.8% Male (7)	22.2% Female (2)
	Yes	**No**
Medical professionals	44.4% (4)	55.6% (5)
Premorbid anxiety	44.4% (4)	55.6% (5)
Normal SAS score	100% (9)	0% (0)
Persistence of fasciculations	88.9% (8)	11.1% (1)





METHODS

A 2-year prospective study of patients with BFS is underway at the Lahey Clinic, Burlington, MA. Patients seen for fasciculations in any location of the body (e.g., arms, legs, bulbar muscles, axial muscles) in the absence of weakness, atrophy, or other neurological symptoms were eligible. Patients were diagnosed with BFS by a neuromuscular physician based on otherwise normal neurologic examinations and had normal electrophysiologic studies except for fasciculation potentials. To date, 15 patients have been enrolled.

BFS course, including background, location and fasciculation type; psychiatric history; and medications were reviewed at initial diagnosis, Months 1, 3, and 6 with plans to continue for 2 years. Anxiety was measured using the Zung Self-Rating Anxiety Scale (SAS)[2].

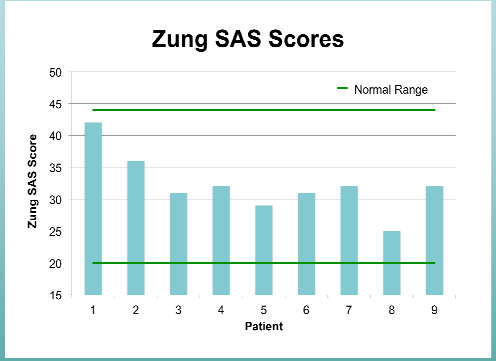


Figure 1. Zung SAS scores for all nine patients at baseline.

RESULTS

Preliminary data is based on 9 patients who have completed their 6 month follow-up. There were seven men and two women with a mean age of 46.7 ±6.4 years. Four patients were in a medical field. Four patients reported premorbid anxiety and four patients reported anxiety at the time of diagnosis. However, based on SAS scores, all patients fell within the normal range (20-44) with a mean score of 32.4 ±4.72 (Figure 1). In eight patients, fasciculations persisted at the six month follow-up. Fasciculations resolved in one patient. Anxiety levels remained within the normal range.

CONCLUSION

Our tentative conclusions are descriptive due to the small sample size at this time. During a six month follow-up period of nine patients, mean SAS scores were lower than published normative data. We plan to enroll further patients and add controls, but our findings suggest that anxiety may not be higher than normal in this population at the time of or after diagnosis, despite the persistence of fasciculations for at least six months.

REFERENCES

[1] Blexrud, M. D., Windebank, A. J. and Daube, J. R. (1993). Long-term follow-up of 121 patients with benign fasciculations. *Ann Neurol.*, 34: 622–625.

[2] Zung, W.W. (1971). A rating instrument for anxiety disorders.*Psychosomatics*, Nov-Dec;12(6):371-9.1

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