Original Research Article

Cardiac evaluation in patient presenting with pseudo seizures - The missing link

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Abstract

Objective: To describe the clinical, etiological and cardiac profile of patients with pseudo seizures. **Materials and Methods:** Prospective cross sectional study,32 patients in the age group of 17-61 years with documented pseudo seizures were included in the study. **Results:** Female preponderance (70%) was noted .Abnormal electrocardiogram was seen in 1 patient .Abnormal echocardiogram noted in 1 patient. SVT was noted in 1 patient during Holter study. TEE did not add any significance for our study. **Conclusion:** cardiac evaluation should routinely be carried out in all patients presenting with pseudo seizures to rule out associated or causative cardiac illness.
Key Word: Cardiac evaluation, pseudo seizures.

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INTRODUCTION

Pseudo seizures is a major hurdle and causes lot of wrong diagnosis for the treating physician. It is important that clinicians consider pseudo seizures when evaluating patients with episodic symptoms. wrong diagnosis may result in inappropriate treatment with potential morbidity. However study helps in understanding the Cardiac causes for pseudo seizures.

BACKGROUND

The etiological factors in cases of pseudo seizures are varied. Our study aims to find out the unique etiological and cardiac characteristics of pseudo seizures.

MATERIALS and METHODS

This is a prospective cross sectional study 32 patients in the age group of 18-60 years with documented pseudo seizures were included in the study. They were subjected to clinical examination, brain imaging(CT/MRI), EEG, video EEG, ECG, echocardiogram Holter and other workup as needed.

RESULTS

The mean age of patients was 32.8± 4.52 years. female preponderance (70%) was noted .abnormal electrocardiogram in the form of WPW syndrome was noted in 1 patient .abnormal echocardiogram with mitral valve prolapse with moderate mitral regurgitation was noted in 1 patient .SVT was noted in 1 patient during Holter study .TEE was done in all patient and did not yield any significant findings.

TRUE SEIZURE + PSEUDOSEIZURE	ONLY PSEUDOSEIZURE	ABNORMAL EEG	ABNORMAL ECG	ABNORMAL ECHOCARDIOGRAM	ABANORMAL HOLTER	ABNORMAL TEE
11 Patients	21 patients	5 Patients	2	1	1	0

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RISK FACTOR	NO OF PTS (%)
STRESS	11(34.3%)
ANXIETY	6(18.75%)
H/O SYNCOPE	2(6.25%)
H/O PAST HISTORY OF SEIZURE	5(15.6%)
H/O TRAUMA	4(12.5%)

CT/MRI	NO(%)
NORMAL	27(84.3%)
INFARCT/HEMORRHAGE	4(12.5%)
INTRACRANIAL SOL	1(3.12%)

DISCUSSION

The diagnosis of pseudo seizures can be challenging. In some case series, delay to PNES diagnosis has been as long as 9 to 16 years (1,2) clinical features that suggest frontal lobe seizures rather than pseudo seizures are a brief duration (less than one minute), stereotyped manifestations, eyes-open during the ictus, and their occurrence during physiologic sleep (3,4,5). Inadequate history, poor physician-patient rapport, reliance upon clinical observation of the event, co-occurrence of pseudo seizures and epilepsy in the same patientand discomfort in making a psychiatric diagnosis contribute significantly for misdiagnosis. Cardiac evaluation in these patients helps in differentiating syncope and to rule out associated or causative cardiac conditions contributing to pseudoseizures.

CONCLUSION

cardiac evaluation should routinely be carried out in all patients presenting with pseudo seizures to rule out associated or causative cardiac illness.

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