

locus coeruleus. These data suggest complex MOA of VNS in both acute and chronic phases.

In recent years, we have studied the combination of VNS and corpus callosotomy, and found the combination of both techniques in selected patients achieves better results than both techniques separately. In this paper we would discuss our tentative experience and indications.

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Experience with short video EEG in small town (yield and cost effectiveness)



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Background: Semiology, type of seizure, true or pseudo-seizure (PNES – psychogenic non epileptic seizures) are often hard to differentiate clinically. Accurate diagnosis is essential for the optimum medical or surgical treatment and outcome for the patient. Most of the times, diagnosis requires inpatient video telemetry, which is both time consuming and expensive. Short video electroencephalography (SV-EEG) has been described previously and was shown to be a useful diagnostic tool in other specialist centres.

Objective: To determine the usefulness of SV-EEG in the diagnosis and management of various seizure types.

Method: After start of SV-EEG facility in Nashik, first 100 cases were selected, 1–55 years done over last 15 months.

Results: SV-EEG done on OPD basis for period of 1–8 h. Age – 1–62 years, M=64:F=36. Abnormal SV-EEG was reported in 75 patients. A positive SV-EEG supporting a diagnosis of true seizures occurred in 62 of patients (generalised epilepsy=15, focal epilepsy=47). PNES was diagnosed in 13 pts. Attacks recorded in these patients were 1–14. No attack or no interictal abnormality was noted in 25% of patients (n=25), resulting in an inconclusive SV-EEG. One patient had undergone anterior temporal lobectomy surgery based on this SV-EEG.

Conclusion: The positive rates of attacks from SV-EEG were comparable and even better to previously published results and show that SV-EEG is easily implemented in small town centres. It is cost effective method with very good diagnostic yield.

No	Inti site	Age	Sex	V EEG Duration (hrs)	Abnormality	No of events	No	Inti site	Age	Sex	V EEG Duration (hrs)	Abnormality	No of events
1	SD	10	MA	2	Normal	Nil	52	VV	11	F	7	PNES	1
2	AD	8	MA	2	Normal	Nil	53	AS	34	MA	6	RT Hemisphere dysfunction	1
3	SP	1imp	F	6	Left MTLE	Nil	54	SI	38	MA	6.5	RI Post Quadrant Epilepsy	1
4	AN	2	MA	6	West syndrome	Nil	55	SA	7.5	MA	4.5	Left Frontal SMA Se	3
5	HC	25	MA	6	Normal	Nil	56	SA	31	F	7.5	RI Ant Temp. Epilepsy	Nil
6	AV	18	F	6	Normal	Nil	57	SP	31	F	7	Left MTLE	3
7	VS	15	F	6	Normal	Nil	58	SN	56	F	6	Left MTLE	3
8	WC	55	MA	6	Left MTLE	Nil	59	UJ	32	F	4	PNES	3
9	VS	37	F	6	Normal	Nil	60	VJ	29	MA	4.5	PNES	4
10	TD	15	F	8	RI Post epilepsy	Nil	61	VV	32	MA	4	PNES	2
11	AK	27	F	6	Normal	Nil	62	VW	24	MA	7	RT Occital Epilepsy	Nil
12	VV	13	MA	8	PNES	2	63	AP	30	F	7	PNES	4
13	SI	30	F	6	RI MTLE	3	64	AC	18	MA	5.5	Normal	Nil
14	GS	12	F	6	RI MTLE	2	65	AP	34	MA	6	Left Centro-Temporal Epilepsy	9
15	GC	14	MA	6	Normal	0	66	DB	28	MA	7	RI Post Quadrant Epilepsy	Nil
16	PK	16	F	7	Normal	Nil	67	DB	28	MA	5	RI Post Quadrant Epilepsy	Nil
17	ND	3	F	4	Normal	5	68	GA	3.5	MA	3.5	Secondary LGS	22
18	SP	14	MA	4	Typical absence	5	69	RB	27	MA	6	Normal	Nil
19	AT	20	MA	6	Normal	Nil	70	RB	27	MA	4	Left & RI MTLE	2
20	SI	33	F	7	RI Temporal Epilepsy	Nil	71	RA	21	F	7.5	RI Gen epilepsy	Nil
21	HG	55	F	4	PNES	8	72	TS	18	MA	4.5	PNES	3
22	CP	40	F	6	Normal	Nil	73	SA	18	MA	1	Gen Tonic	14
23	AK	35	MA	5	PNES	3	74	RI	14	MA	7.3	RT Hemisphere Seizures	1
24	SD	9	F	6	RI Post Quadrant Epilepsy	3	75	RA	21	F	7	PNES	Nil
25	AK	6	MA	5	RI Post Quadrant Epilepsy	Nil	76	AA	12	F	7	RT Hemisphere Seizures	Nil
26	VS	2	MA	6	Post-ictal Generalized	Nil	77	AS	24	MA	2.5	Normal	Nil
27	RMP	15	F	2	PNES	2	78	AD	15	F	6	RI Gen Epilepsy-Absence	Nil
28	VS	24	MA	6	PNES	3	79	AS	24	MA	2.5	Normal	Nil
29	WP	51	MA	6	PNES	2	80	KJ	18	MA	7	Gen Tonic-Symptomatic generalis	1
30	PG	34	MA	6.5	Normal	1	81	BS	38	MA	5	RI MTLE	5
31	MM	24	MA	7	Left MTLE	1	82	KJ	63	MA	7	Normal	Nil
32	US	4	MA	6	MS-LGS	Nil	83	KJ	63	MA	7	Normal	Nil
33	MP	23	MA	7	RI Centro-Temporal	3	84	AK	25	MA	6	No localization/lateralization	Nil
34	VS	24	MA	6.25	RI Post Quadrant Epilepsy	Nil	85	NA	21	F	7.5	Left MTLE	Nil
35	MC	44	MA	6	RI Post Quadrant Epilepsy	Nil	86	AK	17	MA	7	Left MTLE	1
36	MP	11	F	6	Normal	Nil	87	AK	17	MA	7	Left MTLE	1
37	SI	6	F	6	RI Frontopolar	Nil	88	AS	22	MA	7.5	RI Post-temporal	Nil
38	MM	40	MA	5	Left MTLE	Nil	89	SN	25	MA	7	Normal	Nil
39	AK	5	MA	6	RI F-C Left Ant Temporal	Nil	90	AS	22	MA	6	Left (Anterior)	Nil
40	VP	16	MA	5.5	RI Gen epilepsy-IME	3	91	PS	28	F	5.5	PNES (LME)	Nil
41	AK	5	MA	5.5	LGS	Nil	92	RA	62	MA	7.5	Left Frontal	1
42	OW	17	F	7	Normal	1	93	AK	3.5	MA	4	Post quadrant-sec generalisatd	3
43	OW	12	MA	6	RI Frontopolar epilepsy	1	94	AJ	42	F	7	Left MTLE	1
44	SB	17	F	6	Normal	3	95	AJ	42	F	7	Left MTLE	1
45	TD	51	F	6	PNES	Multifoc	96	PA	13	MA	4	MTLE	Nil
46	SB	3.5	F	6	Normal	3	97	AM	12	MA	7.5	RI Post Quadrant Epilepsy	Nil
47	AP	1imp	MA	2	Normal	Nil	98	SB	45	F	7.5	Normal	Nil
48	SI	12	MA	7.5	RI Post-ictal-sec gen	Nil	99	AD	22	MA	6	RI Post-temporal	Nil
49	SD	35	MA	7.5	Normal	Nil	100	MA	17	F	7.5	Left F-C Epilepsy	1
50	SD	35	MA	7	Left MTLE	Nil							

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Uncommon lesions in the medial temporal lobe presenting with intractable epilepsy



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Introduction: Medial temporal lobe is a major site of seizure origin. Lesions present in the medial temporal lobe might predominantly present with epilepsy which might even be refractory to anti-epileptic drugs. We describe 8 uncommon lesions involving the medial temporal lobe which presented with intractable seizures.

Material and methods: 8 patients were included in the study from July, 2014 to July, 2015 who had presented to a tertiary care centre with seizures which were not controlled on medications. Complete clinical and radiological assessment of these cases was done. Treatment received and the seizure outcome (Engel's grade) were also noted.

Results: 6 cases presented with complex partial seizures out of which 5 had olfactory auras. 5 patients had right sided lesions and remaining 3 had left sided lesions. Among these 8 cases, 2 were tuberculomas and cavernomas each, 1 was epidermoid, 1 was ganglioglioma and 1 was a low grade glioma. All patients had a complete excision of the concerned lesion. Anterior medial temporal lobe resection (including amygdala and hippocampal resection) was performed in all these cases. 7 cases had Engel grade 1 seizure control and 1 had Engel grade 2 seizure control. No significant post-operative complication occurred in any of the patients.

Conclusion: Medial temporal lobe may harbour various pathologies and due to its location, it predisposes the patient for seizures. Lesionectomy when combined with AMTR gives good seizure control.

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RNA-Seq analysis of hippocampal tissues reveals novel candidate genes for drug refractory epilepsy in patients with MTLE-HS



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Array-based profiling studies shows aberrant gene expression patterns during epileptogenesis. We have performed RNAseq analysis of the hippocampal tissues resected from the patients with MTLE-HS to investigate the molecular basis of epileptogenicity and/or pharmacoresistance in MTLE. For non-epileptic control experiments, healthy tissues from tumour margins obtained during tumour surgeries were used. RNA sequencing was performed using standard protocols on Illumina HiSeq 2500 platform. Differential gene expression