

JOURNAL REVIEW

Clinical features of chronic headache

Solomon S., Lipton R.B., Newman L.C.
Headache (1992) 32, No. 7, P. 325-329

Patients with chronic daily headache are commonly encountered in headache speciality centers but their clinical characteristics have rarely been documented.

The authors studied 100 consecutive patients with chronic daily headache to determine their presenting characteristics and other associated features. Half of the patients described their headache as a steady ache, but throbbing pain was reported in about one third. About half estimated the degree of pain as moderate but one third claimed the typical pain was severe.

A consistently unilateral site was noted in only 2 per cent. Associated features characteristic of migraine were often noted including photophobia (37 per cent), phonophobia (42 per cent), and nausea (24 per cent). Many also reported aggravating and ameliorating factors commonly associated with migraine.

The authors conclude that the manifestations of chronic daily headache are extremely diverse, probably reflecting the heterogeneous mechanisms which underlie this condition.

Migraine with aura and migraine without aura: an epidemiological study

Rasmussen, B.K., Olesen, J. *Cephalalgia* (1992) 12, No. 4, P. 221-228.

In a cross-sectional study of headache disorders in a representative general population of 1,000 persons, the epidemiology of migraine with aura (MA) and migraine without aura (MO) was analyzed in relation to sex and age distributions, symptomatology and precipitants. The headache disorders were classified on the basis of a clinical interview as well as a physical and a neurological examination using the operational diagnostic criteria of the International Headache Society (IHS).

Life-time prevalence of MA was 5%, male female ratio 1:2. Life-time prevalence of MO was 8%, M:F ratio 1:7. Women, but not men, were significantly more likely to have MO than MA. Neither MA nor MO showed correlation to age in the study.

One or more precipitating factors was present in 61% with MA and in 90% with MO. In both MA and MO the most conspicuous precipitating factor was stress and mental tension. Visual aura occurred in 90% of subjects with MA. Onset at menarche, menstrual precipitation, menstrual problems, influence of pregnancy and use of oral contraceptives all showed some relationship with the presence of MO and MA. 50% of MA and 62% of MO had consulted their general practitioner because of migraine.

Clozapine, single photon emission tomography, and the D2 Dopamine receptor blockade hypothesis of schizophrenia

Pilowsky, L.S.; Costa, D.C.; Ell, P.J.; Murray, R.M.; Verhoeff, N.P.L.G.; Kerwin, R.W. *Lancet* (1992), 340, pp. 199-202

According to the Dopamine hypothesis of schizophrenia, D2 receptor blockade is essential for a drug to have antipsychotic potency, and D2 blockade are linearly related in vitro.

To test this assumption in vivo, the authors have compared clinical response with central D2 Dopamine receptor availability 123Iiodobenzamide single photon emission tomography in two groups of schizophrenic patients. Six patients were on typical anti-psychotic drugs and 10 were on the atypical anti-psychotic Clozapine, including 2 patients from the first group. The patients on typical anti-psychotics showed poor therapeutic response despite D2 receptor blockade.

Significant clinical improvement occurred in all patients on Clozapine, but at a lower level of D2 blockade by the drug. These findings suggest a more complex relation between D2 blockade and clinical efficacy than was previously thought.

The relationship between personality and DSM-III axis I disorders in the population. Results from an epidemiological survey

Nestadt, G., Romonoski, A.J., Samuels, J.F., Folstein, M.F., McHugh, P.R. *Am. J. Psychiatry* (1992) 149, No. 9, P. 1228-1233.

Objective: The aim of this study was to assess the relationships between specific personality disorders and DSM-III axis I disorders in a community sample.

Method: A total of 810 subjects were examined by psychiatrists in the second stage of the Eastern Baltimore Mental Health Survey, part of the Epidemiological Catchment Area Program of the National Institute of Mental Health.

A semi-structured examination, the Standard Psychiatric Examination, was employed to assess axis I and axis II disorders. Scales for compulsive and antisocial personality disorders were derived from DSM-III criteria. The relationships between scores on these personality scales and the presence of generalized anxiety disorder, alcohol use disorders (alcohol abuse and alcohol dependence), and simple phobia were evaluated by using logistic regression.

Results: Higher compulsive personality scores were associated with greater odds of generalized anxiety disorder and simple phobia but a smaller odds of generalized anxiety disorder. There was no relationship between antisocial personality scores and simple phobia.

Conclusion: Personality disorders have specific relationships to axis I disorders which suggest different vulnerabilities, but also different protective influences.

Abnormalities of the left temporal lobe and thought disorder in schizophrenia

Shinto M.E., Kikinis R., Jolesz F.A., Pollak S.D., Le May M., Wible C.G., Hokama H., Martin J., Metcalf D., Coleman M., McCarley R.W.; *N. Eng. J. Med.* (1992) 327, No. 9, P. G04.

Background: Data from postmortem, CT., and magnetic resonance imaging (MRI) studies indicate that patients with schizophrenia may have anatomical abnormalities of the left temporal lobe, but it is unclear whether these abnormalities are related to the thought disorder characteristic of schizophrenia.

Methods: The authors used new MRI neuroimaging techniques to derive (without knowledge of the diagnosis) volume measurements and three-dimensional reconstructions of temporal lobe structures in vivo in 15 right-handed men with chronic schizophrenia and 15 matched controls.

Results: As compared with the controls, the patients had significant reductions in the volume of grey matter in the left anterior hippocampus - amygdala by 19 per cent (95 per cent confidence interval, 3 to 36 per cent),

the left parahippocampal gyrus by 13 per cent (95 per cent confidence interval, 3 to 29 per cent confidence interval, 5 to 25 per cent). The volume of the left posterior superior temporal gyrus correlated with the score on the thought disorder index in the 13 patients evaluated ($r = 0.81$, $p = 0.001$). None of these regional volume of the overall brain or temporal lobe. The volume of grey matter in a control region (the superior frontal gyrus) was essentially the same in the patients and control.

Conclusions: Schizophrenia involves localized reductions in the grey matter of the left temporal lobe. The degree of thought disorder is related to the size of the reduction in volume of the left posterior superior temporal gyrus.

Dr. A. Soliman

Diagnostic agreement in psychiatry. A comparative study between ICD-9, ICD-10 and DSM-III-R

Okasha A. Sadek A., Haddad. MK and Abd-El Mawgoud. M Br. *Journal of Psych.* (1993), 162, 621-626

A random sample of 100 new patients referred to the psychiatric hospital was assessed using the Arabic translation of the PSE in order to know the reliability according to the commonly used classification systems, the ICD-9, the ICD-10 and DSM-III-R. To achieve this study an abstract form was designed to include the PSE scores as well as the necessary extra data to make these classifications. Kappa correlation was calculated for inter-rater and intra-rater reliability.

The use of PSE helped in achieving good agreement between Arab psychiatrists for all the three systems, but ICD-10 was found to have the lightest reliability figures both for three-digit and four-digit psychiatric diagnosis.

Mood and psychiatric disturbance in HIV and AIDS changes over time

Mary Fell, Stanton Newman, Maryherns.. et al., Br. *J. of Psyche.* (1993), 162, 604-610

A sample of 26 HIV seronegative, 59 HIV seropositive a symptomatic and 7 HIV seropositive

symptomatic homosexual and bisexual men were assessed over two visits, a mean of 11 months apart, using the BDI (Beck Depression Inventory), STAI (State Traut. Anxiety Inventory), and CIS (Clinical Interview Schedule).

Mood changes occurring in the symptomatic group was significant but neither reflects the advance of organic disease or the reaction to the chronic illness.

It has become increasingly obvious that psychiatric problems and the somatic complaints were at least partially associated with past psychiatric manifestation before the stigmatization of HIV infection group. The seropositive asymptomatic and the seronegative group did not differ on any of the mood psychiatric assessment suggesting minimal effect on psychological well-being of seroconversion in the absence of symptoms.

Dr. El-Assawi H.

An antispasticity effect of Threonine in multiple sclerosis

Hauser S.L., Doolittle T.H., Shahani B, et al., Arch.

Neurol. (1992) 4:923-926

Threonine is an amino acid which is a potential precursor for glycine biosynthesis in the spinal cord. It was thus postulated that Threonine would have an effect on spasticity in multiple sclerosis. This study involved 26 ambulatory patients. Threonine was administered at 7.5 g/day. Elevation of Threonine levels in serum and CSF was achieved but glycine levels remained unchanged. Threonine actually enhances the glycinergic post synaptic inhibition of the motor reflex arc in the spinal cord. This appeared on clinical examination which showed reduction in the degree of spasticity. Moreover, Threonine therapy is non-sedating, non-toxic and does not increase motor weakness as do other antispasticity drugs in common use.

Risk of deliberate self-harm and factors associated with suicidal behavior among asymptomatic individuals with human immuno deficiency virus infection

Gala C, Pergami A, Gatalan T, Riccio M, et al., Acta Psych. Scand. (1992) 86: 70 -75

The study of the risk of deliberate self-harm (DSH) and suicidal behavior in 213 asymptomatic individuals with human deficiency virus (HIV) infection. Twelve

seropositive subjects were involved in DSH after being notified of their positive results. This behavior came within 6 months to 3 years of the notification. These patients with a past psychiatric history showed a 7.7 fold increase in the relative risk of DSH. Those with an already established history of DSH showed a 5 fold increase in the risk of DSH in comparison to individuals with HIV +ve results, without a past psychiatric history or a history of DSH. It thus follows that patients with HIV +ve tests should be given care and attention from professionals responsible, especially after notification and in later stages as well.

The course of thyroid abnormalities during lithium treatment: a two year follow-up study

Bocchetti A, Bernardi F, Burrai C, et al., Acta Psych. Scand. (1992) 86: 38-41.

A two-year follow-up study performed on 116 patients on lithium therapy was made to determine the course and chemical relevance of thyroid abnormalities. A transient deviation of thyroid stimulating hormone (TSH) concentration was found. The risk of developing hypothyroidism was higher in women. However, TSH levels were significantly lower when carbamazepine was combined with lithium.

Sylvian fissure size in schizophrenia measured with the magnetic resonance imaging (MRI) rating protocol of the consortium to establish a registry for Alzheimer's disease

Schwartz J.M., Aylward E, Batra P E, et al. Am. J. Psychiatry (1992)149 :1195 -1198.

Forty-eight schizophrenic patients and fifty-one normal subjects were chosen for this study. CSF spaces: Sylvian Fissures temporal lobe sulci, temporal horns, third and lateral ventricles, superficial cerebral sulci were visually assessed with the MRI. It was found that in schizophrenics, the Sylvian fissures were bilaterally wider than control subjects. This would thus explain the finding of smaller superior temporal gyri in those patients.

Blood-letting in Bulimia Nervosa

Richard Parkin. J and Jogn M., Eagles; MJP (1993) Vol. 162.

There is a recognized association between various types of self-mutilation (eg. cutting and burning) and eating disorders. However, there appears to be no clear reference in the literature to deliberate blood letting by venepuncture or insertion of intravenous cannulae either as an alternative method of self-mutilation or in association with eating disorders.

Three reported cases showed similarities as regards a lengthy history of eating disorder with symptoms of anorexia preceding bulimia. Two had a history of sexual abuse. They were engaged in blood letting acts which offered relief of anxious, tense and angry feelings, as does bingeing and vomiting.

Psychodynamically, Grad and Mallin (1967) postulated that women who cut themselves did it because of being unable to express themselves verbally due to serious early maternal deprivation. Others viewed blood letting as a "vicarious menstruation" the patient being able to displace bleeding away from genitalia to another part of the body, able to control the blood, and witnessed by others around instead of the uncontrollable unwitnessed bleeding of menstruation.

Biologically, plasma endorphins were found to be elevated in both self-mutilators and in patients with bulimia nervosa. Bulimics also have a low central 5-HT which seems to be associated with impulsive aggression. One explanation set to this phenomenon is that in subarachnoid haemorrhage, the levels of serotonin in the CSF are markedly elevated. Therefore, it would be possible that bingeing, purging and self-cutting, blood letting, perform similar functions in the endorphins and serotonin systems of bulimics.

DR. G. El Nahas

Towards a brain mapping of auditory hallucinations

Cleghorn JM, Franco S. et al. Am. J. Psychiat. (1992) 149, No 8 P. 1062-1069.

Twelve schizophrenic patients who experienced auditory hallucinations had lower metabolism in the language regions of the cortex [auditory & Wernicke's] in a pattern similar to that seen in normal subjects listening to their own voices but different in that left prefrontal regions are not activated. The striatum plays a critical role in auditory hallucination. Neuroleptic treatment resulted in a significant increase in striatal metabolism and a decrease in hallucination scores.

Duration of psychosis and outcome in 1st episode schizophrenia

Leobel AD, Lieberman JA et al. Am J. Psychiat. (1992) 149, No 9 P. 1183-1188.

Seventy patients with a mean duration of psychiatric symptoms before initial treatment of about 52 weeks were studied for the outcome. The duration of psychosis before treatment may be an important predictor of outcome (time of remission and degree of symptom remission) in the first episode.

Schizophrenia: Acute psychotic symptoms could reflect an active morbid process which, if not ameliorated by neuroleptic drug treatment, may result in lasting morbidity.

Inter-relation between migraine and tension-type headache in the general population

Rasmussen BK, Jensen R et al., Arch Neurol (1992) 49, No. 9, P. 914-918

A cross-sectional epidemiological survey of a general population for headache disorders proved the following findings:

1. Migraine and tension-type headache are two distinct entities.
2. The migraine attack is an all-or-none phenomenon triggered with an individually variable threshold.
3. Tension-type headache showed increasing severity with increasing frequency, indicating that it is a graded phenomenon.
4. Incidence:
 - 6% had migraine without aura more in women with more severe pain;
 - 4% had migraine with aura, more in men;
 - 63% had episodic tension-type headache;
 - 3% had chronic tension-type headache in migraineurs was not significantly more prevalent than in non-migraineurs, except for greater frequency and severity.

Specific and non-specific effects of educational intervention for families living with schizophrenia

Birchwood M, Smith J. et al. Br. J. Psychiat. (1992) 160, P. 806-814

The intervention led to considerable gains in knowledge, increased optimism concerning the family's role in treatment, and reductions in relatives' stress, and significant improvements in social function were observed. It was suggested that the delivery of information rather than the mode of delivery is the crucial element in the intervention.

Prognosis of epilepsy

Elwes R. Medicine Digest.

It is now widely appreciated that effective treatment at the onset of the disease is important in improving the long-term prognosis. Once the patient has experienced two or more seizures, treatment is usually started and 80% of cases achieve a prolonged remission within 1-2 years. Patients with focal epilepsy and epilepsies with associated neurological deficits tend to do less well although 60% of cases are controlled.

Children with genetically determined epilepsy syndromes and juvenile myoclonic epilepsy do particularly well on treatment.

On stopping treatment, between 20% and 40% of patients experience a withdrawal seizure which is usually an isolated event.

Dr. N. Nagui

Focal neuropsychiatric syndromes. After cerebro-vascular Disease

*Carlos S. Castillo and Robert G. Robinson
Department of Psychiatry, University of Iowa, College of Medicine, Iowa City, Iowa, U.S.A.*

This article, highlights the most recently reported prevalence and the relationship to brain injury and cerebrovascular lesions of depression, mania, bipolar disorder, generalized anxiety disorder, and schizophreniform disorder.

Prevalence:

Two studies have examined the prevalence of DSM III major depressive disorder in traumatic brain injured population. They found a prevalence of 27% out of 66

acute traumatic brain injured patients in one study and 77% out of 120 patients in the other study.

In this study, 46% of the patients with depression thought that their symptoms had started more than 6 months after the injury, and 41% had experienced onset of symptoms before 6 months following the injury.

The prevalence of DSM-III defined GAD was 26% in stroke patients (seen within 3 weeks after their stroke) with concurrent depression and 11% in patients free of depression.

No empirical studies have reported the prevalence of post stroke mania, bipolar disorder or schizophrenic or schizophreniform disorder.

Relationship of focal syndromes to lesion location: Major Depression is the most common psychiatric manifestation after acute stroke or C.V. stroke. It occurs also with traumatic brain injuries if lesion affects left frontal cortex lobe or left basal ganglia.

Bipolar affective disorder is likely to develop after right sub-cortical lesion whereas mania is more likely to develop after right cortical lesion mainly basotemporal or orbitofrontal cortical lesion.

Generalized anxiety disorder with depressed anxious mood are more with left hemispheric lesion mainly cortical (dorsolateral-frontal lobe). GAD without depressed anxious mood is more likely to develop after right posterior hemispheric lesion. Schizophrenia developed after injury to the right hemisphere. However the pre-existing sub-cortical atrophy is essential for the manifestation.

N.B. Lesion studies do not necessarily make the anatomical site of disorder i.e. focal neuropsychiatric syndromes discussed before not localizing as lesion may lead to clinical disorders through their effect on distant brain site (phenomenon referred to as diaschisis) or the lesion may also lead to disorders by removing the inhibitory mechanism which normally prevents the emergence of these symptoms. So further work is needed to identify the cause of these neuropsychiatric manifestation.

1. The finding must be consistent from one patient to another.
2. To identify the anatomical substrates and to examine the functional (i.e. metabolic and neurochemical) alteration produced by this lesion by PET and SPECT.

3. Lesion can have a distant (diaschisis) effect not associated with its neuropsychiatric manifestation.

Dr. M. Mansour

CURRENT PSYCHIATRY would like to thank all the authors and Journals who have made it possible for young Egyptian physicians to view these selected works.