

DELIRIUM ACUTUM – AN UNCOMMON LIFE-THREATENING PSYCHIATRIC EMERGENCY

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INTRODUCTION

Psychiatric crises are of interest to practising physicians as they are liable to disrupt the smooth running of a medical ward, cause disturbance to other patients and arouse a disproportionate degree of anxiety in both medical and nursing staff. They are seldom directly life-threatening. Deaths may result from suicidal attempts by the deeply depressed patients; mortal injuries sustained by the very agitated, violent patients; fatal wounds inflicted on innocent passersby during an episode of running "amok"; and massive aspiration during a particularly prolonged, stuporous episode, etc.

"Delirium acutum" is an acute psychiatric emergency, which is rare but potentially life-threatening. It presents with real *physical crises*, simulating an organic rather than a psychiatric disorder, and unless recognised as such, treatment will be futile and death almost inevitable. A classical case of this rare psychiatric crisis with life-threatening potential and an abundance of real physical manifestations is presented.

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CASE REPORT

L.C.K. was a 32 year old Chinese lady, married, gravida 6, para 6. She was apparently in good health until a week prior to presentation when she became depressed following a quarrel with her brother-in-law over financial matters. She started to have insomnia, and was noted to be unusually agitated and garrulous. She was brought to see a general practitioner and was given some psychotropic drugs. Two days after this she developed a swinging fever, became increasingly confused and incoherent. She was noted to have jerking movements of both her upper limbs alternating with periods of quiescence, characterised by the patient lying very still with marked rigidity of her whole body. The patient was, however, able to feed and during this period was treated by several general practitioners, sinseh and an acupuncturist, with no improvement.

On the day of presentation, exactly a week from the onset of her illness, the patient became completely stuporose with marked rigidity. She was having a very high temperature and because of difficulty in feeding her, she was brought for admission to the hospital. There was no known previous psychiatric history.

On examination during admission, she was febrile with a temperature of 103.2°F, a tachycardia of 140/m, Bp 150/100 mm Hg. The patient was stuporous with generalised rigidity. There was no response to verbal command or painful stimuli. She exhibited a persistent pouting

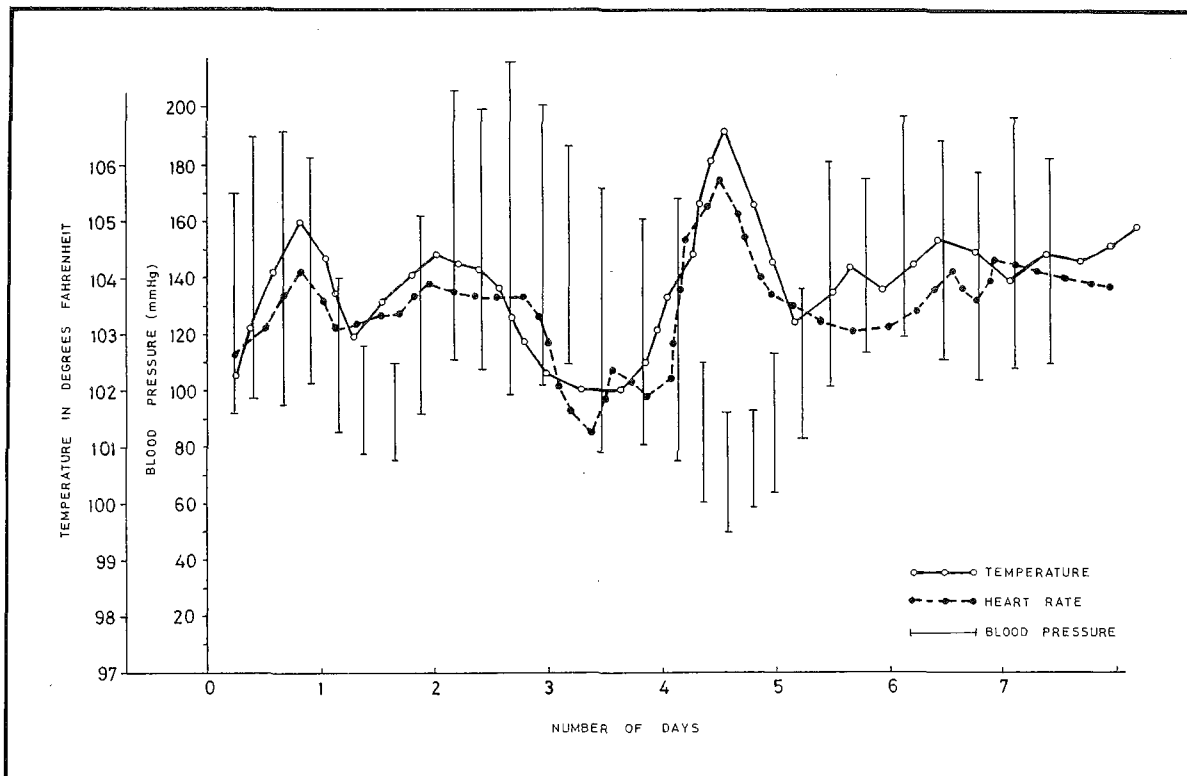


Fig. 1 Chart showing typical wide fluctuations in temperature, blood pressure, heart rate recordings over a one week admission period.

of her lips with rhythmic protrusion and withdrawal of her tongue, accompanied by throaty pharyngeal noises. There was no neck stiffness.

An encephalitis was initially queried but investigations to confirm this were unremarkable. Repeated lumbar punctures on three different occasions were persistently and grossly normal. Her haematological studies revealed a leucocytosis of 21,000/c.mm suggestive of an acute pyogenic infection. All investigations to localise this were negative: CXR, blood cultures, urinary analysis and repeated, detailed physical examination all proved negative. Tests were also done to exclude malaria and other common tropical diseases with central nervous system manifestations. These were also negative. A search for an auto-immune collagen disorder was equally unfruitful; thyroid-function test was also normal. The only other abnormal results were a raised ESR (46 mm in 1st hour) and a slightly raised blood urea (58 mg%).

The patient was empirically started on antibiotics with no response. Over a two week period of admission, her condition deteriorated

with swinging fever, on many occasions reaching hyperpyrexia levels (106°F). She showed wide lability in her temperatures, blood pressures (ranging from 200 systolic to 80 systolic) and heart rates. (Fig. 1). There was also peripheral cyanosis, marked sweating and periods of oliguria. Her stupor became increasingly deep, with gross twitching movements and also exhibiting some degree of waxy flexibility.

A few days after the patient was admitted, the possibility of a psychiatric disorder with life-threatening physical manifestations namely "delirium acutum" was raised. When the patient's condition deteriorated and death became imminent, with vasomotor collapse, etc, psychiatric modality of treatment was instituted after discussion with the family. After the stabilization of her blood pressure, ECT was given. This was followed after the second shock by a slow settling of her temperature and a stabilization of her physical signs. By the 4th shock the patient was able to communicate for the first time since admission. To date the patient had had 9 ECTs and continued to

improve with treatment. She was also started on Largactil.

DISCUSSION

"Delirium acutum" is a psychiatric condition first described in 1832 by Calmeil, and has since been variously referred to as "fatal catatonia"¹, "acute exhaustive psychosis" or "acute catatonic delirium". It usually complicates an established psychosis, either manic depressive or schizophrenic, but has been known also to arise de novo.² Commonly it develops spontaneously though occasionally anti-depressant or anti-psychotic medications have been identified as the precipitants.³

The clinical picture consists of stupor alternating with violent excitement, with motor restlessness, and catatonic phenomenon such as waxy flexibility. There is a predominance of genuine organic physical signs, with pyrexia as a constant feature, associated with profuse sweating, peripheral cyanosis, tachycardia, and labile blood pressure. Other common features include an elevated ESR, a polymorph leucocytosis, a raised BUN, and a normal or mildly abnormal EEG.

The pyrexia and leucocytosis strongly indicate an infectious aetiology; the stupor, and restlessness suggest a cerebral localisation, such as encephalitis, etc. However, extensive investigations are invariably unhelpful, in particular no infection can be detected, and response to antibiotics nil. There is a mortality of around 30 percent, usually from hyperpyrexia and/or vasomotor collapse; death occurs within hours to days of onset. Post-mortem examinations are usually unhelpful, and changes are insufficient to account for death. In some ways, the disorder resembles the malignant hyperpyrexia syndrome.^{4,5}

Treatments recommended included hypothermia, i/v steroids, iv procaine, chlorpromazine and intensive ECTs.⁶

The case we report exemplifies this condition. The very gross physical abnormalities with labile blood pressure, hyperpyrexia, tachycardia and profuse sweatiness strongly suggest an organic infective lesion. Although the correct diagnosis was suspected, there was a great reluctance to initiate psychiatric modalities of treatment; ECTs,

etc were finally started when the patient's condition deteriorated and death was imminent. The response to treatment was slow but dramatic, once ECT was started.

In a clinical situation where there is a combination of physical and psychiatric signs, especially if the patient is not able to communicate, and a "crisis situation" is prevailing, it may be difficult to determine whether one is dealing with an organic disorder presenting with psychiatric symptoms, or a psychiatric disorder with organic manifestations, or a therapeutic problem with co-existent physical and psychiatric disorders. The tendency is to opt for a physical rather than a psychiatric illness, especially when the physical manifestations are as gross as in "Delirium Acutum".

A correct diagnosis of this condition rests on an awareness of the disorder, and the typical presentations. Delirium acutum must be considered as a cause of pyrexia of an unknown origin, and must be differentiated from the malignant hyperpyrexia syndrome.

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