

Sketches from the history of psychiatry

The Horton Malaria Laboratory

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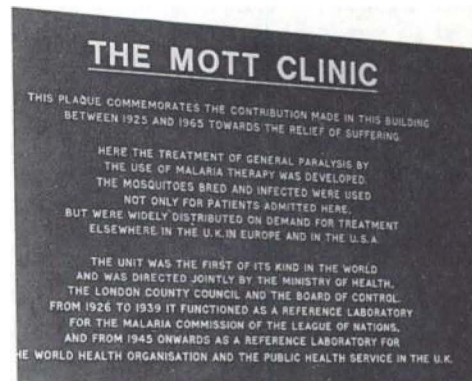
Horton Hospital, Epsom, has many claims to fame; but none so worthy of communication than the unique contribution towards the relief of suffering made by the Horton Laboratory, the name by which it became universally known.

The history of the laboratory may read like science fiction: it is nonetheless a fascinating if little-known chapter of science fact. The prologue was set in Vienna about 1918, with the discovery by Professor Wagner-Jauregg of the treatment of syphilitic general paralysis of the insane (GPI) with malaria-induced fever. Before this GPI had been a killer; a measure of the devastation it created was the fact that in 1921 about 10% of all patients in mental hospitals in Britain were victims of the disease, and most of them were destined to die a wretched, lingering death. News of the epoch-making therapeutic advance reached the Ministry of Health, which lost little time in introducing it. Serious hazards were encountered at first, due largely to a lack of awareness of the lethal effects of certain species of human malaria parasites such as *Plasmodium falciparum*. In one hospital alone, for example, five patients died within three weeks of being given venous blood from a malaria-infected seaman recently arrived from West Africa.

It was, indeed, in an attempt to render the treatment as safe as possible that the Horton Laboratory came to be established. Colonel S. P. James, the first director, laid down the criteria that should be met before the strain of parasite could be considered safe for use in man. Eventually such a strain was found in a lascar who had contracted malaria in Madagascar. On an historic day, 25 May 1925, mosquitoes infected with this strain were taken to Horton and fed on two female patients, so establishing the so-called Madagascar strain of *P. vivax* – and with it the reputation of the laboratory. At first the prime function of the laboratory was to provide malaria parasites for any hospital in Britain to use in the treatment of GPI. So well did it meet its obligations that until penicillin made the treatment obsolete the laboratory provided material for many thousands of victims of GPI, and some 16,000 were treated in Horton Hospital alone.

Malaria therapy, it was soon discovered, provided a unique opportunity to study malaria itself in the

greatest detail, an opportunity that the high-calibre personnel of the laboratory were not slow to exploit. Before long a steady stream of publications began to appear in scientific journals all over the world bearing the Horton Laboratory imprint. They record an impressive list of major discoveries, but none so important as that of the exoerythrocytic parasite in the liver in man in 1948. As its fame spread so workers from many European countries and the USA came to study in the laboratory and then to return home armed with its philosophy and techniques.



Commemorative plaque unveiled by Professor P. C. C. Garnham on 2 June 1975.

Help of inestimable value to the Allied cause was contributed by the laboratory in the Second World War. The outbreak of hostilities brought to an end the co-operation between Germany and Britain in testing synthetic antimalarial drugs. The early victories of the Japanese in the Far East resulted in supplies of quinine being cut off, thus exposing our troops in North Africa and Burma to the grave danger of having to cope without adequate anti-malarial drugs. Extreme urgency was given to the further development of mepacrine, already known to be more effective than quinine as a curative agent. It fell to the Horton Laboratory to test the drug

conditions of maximum secrecy, and the ultimate success of the programme is in itself a story of epic proportions.

The laboratory was singularly fortunate in its long line of distinguished directors starting with Colonel James and ending with Professor Garnham. However, few would doubt that the real star of the show was the late Mr C. P. Shute, who joined the laboratory at its inception in 1925 and then rose from the ranks to serve as its assistant director from 1944 until its

closure in 1973. This remarkable man, by trade a baker, was by an act of providence transmuted into a world-class scientist. He had the added virtue of being articulate as his innumerable papers bear witness.

There is a fitting epilogue. The Wellcome Museum has generously undertaken the safekeeping of the laboratory's memorabilia and in so doing one of the heroic chapters of the history of medicine of our time will be preserved.

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Psychiatry and the media

Cold comfort

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A psychiatrist's interest in human suffering is not restricted to daily work. Trainees in Oxford, asked to pick out six novels which had been important to them, chose books concerned with "alienation, sexuality and suicide" (Harrison & Day, 1988). Respondents to such a survey in the future might well include *The Comforts of Madness* (Sayer, 1988), surprise winner of the Constable Trophy for fiction in 1988 and subsequently the coveted Whitbread prize. It is former psychiatric nurse Paul Sayer's first book. He started writing in his twenties after taking a break from nursing to run a corner shop with his wife. In his spare time he read. He explains, "I was standing in the corner shop one day, and I just felt this urge to write" (Winder, 1989). He returned to nursing and at the same time, started to write about a world that was familiar to him.

The Comforts of Madness is the story of a catatonic, Peter, the silent narrator of the novel. To the rest of the world he is an abandoned inert body, but his own consciousness is vital and reflective. With chilling detachment Peter reflects on his life history and his changing relationships with other people. The book opens at the start of another day on the long-stay ward of a mental hospital. "I had hoped to remain unturned, but it was not to be. The night nurse came with the first ashes of dawn, ripping back the bedcovers, sighing audibly, then tossing back the counterpane while he went in search of clean linen. None of this was particularly remarkable; it was the same every morning." On this morning though one of the patients has cut his throat. Peter senses he would be implicated; "their wish to find a scapegoat

for the night nurse's inefficiency would be irresistible"; he wonders what his fate will be. He finds himself summoned to the ward office to silently account for himself before his doctor, the "consultant, judge and jury, a maker of decisions". There he also encounters Anna, director from the New World Rehabilitation Centre. She is fighting to prove the effectiveness of her centre's experimental regime to higher authorities, who have challenged her to tackle a difficult case such as Peter's.

Peter is transported to the New World Centre, where neglect is replaced by the most brutal humanity. The silent threat of the catatonic to the success of the new enterprise is too much for Anna's co-director, "God, but you're a cunning bastard. . . . If I were not a scientific man I would say you were the devil himself. . . . If I ever come across your case again I shall not be able to account for my actions. How do you do it? What demon's secret have you learned? Tell me. Tell me now, you bastard. Tell me!"

The story is highly disturbing and starkly related. We share Peter's feelings of alienation while experiencing the reality of his plight. There is a horrid fascination in trying to discover how a boy could have slipped into such hell as an adult.

References

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