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AS WE WERE... Origins of anaesthesia in Rhodesia (Zimbabwe)

The first recorded anaesthetic in what is now Zimbabwe was administered at Hope Fountain mission station, south-east of Bulawayo, in 1878 or early 1879. The wife of one of the missionaries was having a difficult labour requiring instrumental delivery performed by the senior missionary, Charles Helm, who had some medical training. Helm's wife, Elsbeth, in fear and trembling, administered chloroform by handkerchief to the expectant mother. Fortunately, both mother and child did well.

The pioneer column which entered the country in 1890 included several medical men in addition to its leader, Leander Starr Jameson. They brought substantial medical supplies, including morphine – which Jameson used to treat the Ndebele King, Lobengula, who suffered from gout. Dr Frank Rand was a trained surgeon who administered chloroform to a patient in Fort Salisbury for the repair of a severely injured hand - three hours under candlelight! Fellow-pioneer John Strachan, a chemist, brought supplies of nitrous oxide, which he used to establish a successful dentistry practice. He was joined in 1904 by an American dentist, Byron-Moore, who manufactured his own nitrous oxide. Recognising the deficiencies of the gas at altitude, he

bubbled nitrous oxide through alcohol and chloroform, producing what he called 'vitalised air' that provided more satisfactory anaesthesia. He also explored the use of cocaine and procaine for local anaesthesia.

With the population expanding, hospitals were built in Bulawayo and Salisbury, and a recent arrival, Dr Andrew Fleming (1894), was the first full-time doctor appointed to the staff of the new Salisbury Hospital. He became Medical Director and Inspector of Health while Dr Rand was appointed surgeon to the Salisbury Hospital from 1897 to 1899. In Bulawayo, the first medical officer was Dr Fred Vigne, who arrived in 1893 and was soon joined by others, including Edward Head. Dr Head soon showed himself highly

proficient at anaesthesia and was the first official appointee as Senior Anaesthetist to the Bulawayo Hospital. He was highly skilled in the 'rag and bottle' technique, using chloroform, ether or ACE (a mixture of alcohol, chloroform and ether).

The influx of medical practitioners included Godfrey Martin Huggins (later Prime Minister and Lord Malvern), who arrived in Salisbury in 1911. Huggins formed a partnership that soon included two regular anaesthetists -Dr R S MacNaughton (who became expert with the Shipway apparatus) in 1912 and Dr J E Hurworth (who later became the first full-time appointment as Anaesthetist at the Salisbury Hospital) in 1919. However, there were no real specialists at this time, and a

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hospital surgical-theatre list from 1911 shows several practitioners acting as anaesthetist at different times, including Huggins himself. The technique was invariably either ACE or chloroform.

In the rural areas, anaesthesia was frequently given by non-medical personnel, often including family members! Mt Selinda (Adventist Mission) Hospital and Morgenster Mission Hospital had recorded more than 600 surgical procedures by 1952. Sadly, there are no records as to who gave what anaesthesia or of the outcomes.

Worldwide improvements in anaesthetic equipment were having an impact, and by 1943 a Boyle's machine was available in Salisbury, although it was reported that 'rag and bottle' was still the most widely used technique.

The first trained specialist, holding an English Diploma in Anaesthesia, G V S Wright, arrived in 1950 and commented on the mediocre standard of anaesthesia in the country at the time. However, anaesthetic practice rapidly improved with the introduction of thiopentone and nitrous-oxideoxygen mixtures (often with ether or cyclopropane) from a proper breathing circuit. Several more specialists arrived over the next few years, bringing with them expertise and new techniques (including various muscle relaxants). Halothane was introduced in 1958 and warmly welcomed despite its great expense!



In Bulawavo, Peter Cushman was appointed as full-time anaesthetist and recruited several people over the following years to form the first strong core of anaesthetists in public service. These included R A Cahi, S Zwana, and later | C Dlamini and J Andifasi. Cahi became the first Rhodesian to obtain the FFARCS (UK) and later established the first intensive care unit, initially to treat tetanus.

The Godfrey Huggins School of Medicine opened in Salisbury in 1963, and an independent department of anaesthetics was established in 1974 with Professor Ashley Duthie as the first head. Training in anaesthesia at that time emphasised clinical skills, as modern essentials such as automated sphygmomanometers, gas analysers and pulse oximeters were non-existent. Perhaps it was these challenging conditions that enabled the training of a solid base of local specialists, nurse-anaesthetists and many highquality individuals (including three full professors) who have made their mark internationally.

More recently, the economic crises in Zimbabwe have massively handicapped the training of anaesthetists, but a dedicated core of specialists have maintained good clinical training and practice despite the difficulties.

Note: after independence in 1980, Rhodesia was renamed Zimbabwe and several place names have changed. I have used the names that were relevant at the time to avoid confusion.

References

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