

THE EMOTIONAL PATTERN OF THE TRIBAL ZULU AS IT AFFECTS PRE-ANAESTHETIC ASSESSMENT AND MANAGEMENT*

R. A. FINDLAY, M.B., CH.B. (CAPE TOWN)

Department of Anaesthesia, University of Natal and King Edward VIII Hospital, Durban

It is one of the implicit functions of an anaesthetist to note the emotional state of his patient in order to induce tranquility by means of reassurance, suggestion and suitable premedication. For the European anaesthetist some knowledge of the history, beliefs and customs of the Zulu, as presented in this paper, proves very rewarding, if not indispensable for success, when anaesthetizing the *apparently* complacent and robust average Zulu.

Certainly the tradition-bound tribal Zulu is a stoical person. Fear, however, is deceptively masked by the absence of its outward manifestations. Thus the usual reaction to stress can be described as autonomic rather than vocal. The Zulu shares the belief of other warrior races that courage, as such, should be regarded as a primary virtue, and any display of fear as contemptuous self-indulgence. The psychosomatic implications of this are the actually exaggerated responses anaesthetists encounter daily in the Zulu as a result of moderate physiological and pharmacological interference.

A clue towards the uniqueness of the Bantu in general, as a subject for anaesthesia, is undoubtedly his poor nutritional state, but that is by no means the whole story. Lamont and Blignault¹ found 18 cases of delirium tremens and 12 cases of alcoholic hallucinosis among 258 male Bantu admissions to Weskoppies (Mental) Hospital. They all cleared up completely in a short period, despite their lack of a balanced diet.

As a district surgeon for several years it was my duty to examine the Zulu inmates of a certain gaol who were sentenced to be flogged. I was invariably impressed by their nonchalant, even disdainful bearing. This calm exterior, however, belied an intense emotional reaction ascertainable from recordings of pulse-rate and blood pressure; these revealed gross sympathetic overactivity as a rule.

I had no controls from other racial groups, but these cases completely changed my previously-held opinion of the Zulu as an unimaginative race with peculiarly stable autonomic nervous systems. More recently my experience as an anaesthetist has confirmed and strengthened this new view. Anaesthetists in other parts of the world appear to concur. Keating² reported an abnormally severe carbohydrate metabolic response to surgical trauma in coloured Jamaican patients, and attributed this to an excessive adrenal activity, adding that it might well account, in part, for 'the high operative mortality and circulatory collapse during or after severe surgical trauma in this racial group'. This observation is the lot of every anaesthetist I have known working at our enormous non-European hospital, however immune he may have imagined himself to 'cardiac arrests' before arrival here.

Poe,³ of Memphis, Tennessee, states: 'The sharp difference between the mortality rates in White and Negro subjects has been noticed by many observers. There are several explanations. It has been said that the Negro is particularly susceptible to apprehension, fright and panic. The physiological symptoms which accompany the state of anxiety interfere with the anaesthesia management in these cases'. It is perhaps significant that the Zulu uses the special word *qataza* for excrement passed in extreme fear.⁴ In days gone by epidemics of *qataza* are said to have affected entire villages when the execution parties of the old Zulu kings were in the neighbourhood. Many similar examples of abnormal parasympathetic predominance may still be seen today in country practice in Natal and Zululand. Especially familiar to general practitioners here is a syndrome of incapacitating psychosis associated with little or no organic demonstrable pathology, apparently induced by a witch doctor. Thus a common obsession is one of angry ancestral spirits desiring the death of the victim and, indeed actual death purely in deference to the *inyanga's*

* Abstract of a paper read at a meeting of the Atherstonian Society, 12 November 1959, Entabeni Hospital, Durban.

predictions is considered commonplace. Dehydration and inanition may account for this, just as the typically listless, uncomplaining and fatalistic outlook certainly suggests schizophrenia, but to my mind all that still does not explain the exceptionally common concomitant evidence of excessive vagal tone.

Zulus from the country, and to a lesser extent those from the towns and cities, often hold the naïve view that the hospital is a place where people are sent to die. They are inordinately afraid of anaesthetic and surgical procedures, being commonly much less confident of a successful outcome than the better-informed European. The Zulu is particularly prone to attribute his illness to supernatural intervention, having an acute awareness of supernatural powers, of which he is invariably mortally afraid. This rarely applies, incidentally, to obvious aetiology such as trauma.

It should always be remembered that fortitude, dignity and lots of patience are national traits of the tribal Zulu, inculcated by an upbringing based on his natural customs and tradition. This should, however, never mislead one as necessarily implying a placid nature. On the contrary, anticipation of his nature as described above demands positive action on the part of the anaesthetist. Psychological preparation should always include a greeting and the articulate expression of a few readily learned courtesies in the Zulu language. After rapport with the patient has thus been established an interpreter may take over, to furnish a brief explanation of the purpose of the anaesthetic and the assurance (where reasonably justified) that all will be well. Great care should be taken not to patronize the adult patient unduly. The Zulu belongs to a tribe which rose to greatness on its own, inheritors of a truly great tradition.

Irrespective of whether local or general anaesthesia is in the offing, an effective dose of anticholinergic and sedative drug combination, such as full therapeutic doses of pethidine, promethazine, and perhaps atropine as well, should never be omitted from the premedication. Phenothiazine derivatives such as mepazine⁵ (pacatal), perphenazine, chlorpromazine and promazine⁶ have been found to

afford specific protection to dogs against cyclopropane-adrenaline arrhythmias. Zulu patients should have the benefit of this, quite apart from our impression of the greater incidence of postoperative nausea and vomiting among non-Europeans. Otherwise I am convinced that analgesic solutions containing adrenaline, and cyclopropane-induced general anaesthesia, will result in disaster for the Zulu far more commonly than for the European or Asian.

While being guided in general by the condition of the individual patient, my preference, therefore, is for 'heavy' premedication. Unfortunately the malnutrition and accompanying disturbed liver-function must temper this tendency. With phenothiazine derivatives accurate timing of premedication is less important, another big advantage over atropine as a sole anticholinergic and antisialagogue drug. I therefore consider the use of a phenothiazine derivative justified, despite the possibly slightly delayed recovery.

It may be mentioned in conclusion that, apart from these emotional factors, there is more than an inherently greater risk in the Zulu as a subject for anaesthesia. For instance, his greater incidence of pericarditis,⁷ which is usually tuberculous in origin, of beri-beri heart disease, and probably of 'cardiac failure of unknown origin'⁷ must always be borne in mind.

I wish to thank Prof. Sir R. Macintosh, of Oxford, and Dr. H. Grant-Whyte, Head of the Department of Anaesthesia at King Edward VIII Hospital, for encouragement and perusal of the manuscript, and Dr. J. W. Mostert, now of the Johannesburg General Hospital, for his help in the preparation of this abstract.

REFERENCES

1. Lamont, A. and Blignault, W. J. (1953): *S. Afr. Med. J.*, 27, 637.
2. Keating, V. (1958): *Anaesthesia*, 13, 443.
3. Poe, J. (1953): *Anesthesiology*, 14, 87.
4. Bryant, A. T. (1949): *The Zulu People*, Pietermaritzburg: Shuter and Shooter.
5. Corssen, G., Eggers, G. W. N., Gadermann, E., Giese, M. and Allen, C. R. (1958): *Anesthesiology*, 19, 733.
6. Winbury, M. M., Hausler, L. M., Wolf, J. K., Klein, M. J. and Govier, W. M. (1958): *Ibid.*, 19, 743.
7. Schrire, V. (1959): *S. Afr. Med. J.*, 33, 810.