Achalasia in Zimbabwean blacks

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Summary

The incidence and clinical features of achalasia in Zimbabwe have not previously been documented. During a 10-year period (1974-1983) 25 cases were seen in Bulawayo and Harare. The estimated incidence is 0.03/100,000 members of the population per year, which is much less than the incidence in Europe and America. Achalasia occurred at any age and there was a preponderance of cases in males. Dysphagia was invariable and its duration varied from 2 weeks to 15 years. Parotid enlargement was found in 2 patients and respiratory infections occurred relatively frequently. The importance of excluding oesophageal carcinoma is emphasized.

Carcinoma of the oesophagus is one of the most common diseases in Africa and has been studied extensively; however, benign oesophageal disease is uncommon and has received little attention.1 Malignant disease of the oesophagus is common in Zimbabwe,2 but little is known about benign oesophageal disease generally and achalasia in particular. It has been stated in the past that achalasia is rare in African populations.3 The features of achalasia in Zimbabwe have not previously been well documented.4

Patients and methods

Hospital case notes and operation reports of all black patients in whom achalasia was diagnosed over a 10-year period (1974-1985) at the Harare group of hospitals (2 hospitals) and Mpilo Hospital, Bulawayo, were examined and relevant information was extracted. A firm diagnosis of achalasia is usually based on the results of oesophageal motility studies and a positive methacholine test. Since these are not performed in Zimbabwe, a diagnosis of achalasia was presumed on the basis of suggestive results of oesophagoscopy and a barium swallow examination. In addition, a diagnosis of achalasia was presumed in 2 patients for whom no record of a barium swallow examination could be found but who had undergone an oesophagomyotomy for achalasia and had findings compatible with this diagnosis on oesophagoscopy.

During the 10-year period a diagnosis of achalasia was made in 28 patients. One patient was found at operation to have oesophageal carcinoma in spite of the results of barium studies. Two infants (aged 1 month and 9 months) presented with regurgitation and failure to thrive. Barium studies suggested achalasia but both died before surgery could be performed, one from pneumonia and the other from an undetermined cause. The clinical features of the remaining 25 patients are recorded. Fourteen of the patients were seen in Harare and 11 in Bulawayo. There was no discernible difference in clinical presentation, and the two groups are considered together. The age and sex distribution of patients is shown in Table I. The duration of symptoms ranged from 2 weeks to 15 years (Table II); the presenting symptoms are listed in Table III.

Bilateral parotid enlargement was found in 2 patients. The chest radiograph suggested the diagnosis of achalasia in 5 patients. There was no record of the barium swallow examination in 2 patients but in the remaining 23 the characteristic features of achalasia were noted. Oesophagoscopy was performed in all 25 patients and the findings were compatible with a diagnosis of achalasia. A modified Heller's operation was performed in 18 patients (72%), 1 patient with severe aortic incompetence was too ill for surgery and was treated by dilation, and 6 patients refused surgery. The postoperative course was uncomplicated except in 6 patients who developed respiratory infections. Five patients had a recurrence of symp-
Discussion

Achalasia is uncommon in black Africans. Silber\(^1\) (Cape Town) has seen 26 cases in 20 years, the largest series recorded. Almost all major thoracic surgery in Zimbabwe is carried out in the 3 hospitals studied. It is therefore likely that most black patients who underwent surgery for achalasia from 1974 to 1983 are recorded in our study. It is impossible to estimate figures for patients refusing surgery and who were managed conservatively at peripheral hospitals or as outpatients. There are few statistical studies of the incidence of achalasia, but the reported incidence in Europe varies from 0.6 - 2/100 000 members of the population per year.\(^5\) The black population of Zimbabwe is 7.3 million and on the basis of our study the calculated incidence of achalasia is 0.03/100 000 members of the population per year.

In most studies the sex incidence is equal\(^6\) or there may be a slight male preponderance.\(^7\) Achalasia may occur at any age but is uncommon in children under 10 years old, although symptoms may date back to infancy.\(^8\) Achalasia does occur in infants but it is often difficult to establish a definite diagnosis and the condition may be confused with congenital stricture of the oesophagus.\(^9\) For this reason the 2 infants in our study were not included as definite cases of achalasia.

The clinical features of achalasia in Africa are similar to those seen in Europe except that bilateral enlargement of the parotid glands may occur. Parotid enlargement is described with the mega-oesophagus seen in Chagas' disease but is not a feature of achalasia seen in Europe.\(^1\) Davey\(^7\) reported bilateral parotid enlargement in 35% of his cases, Silber\(^4\) reported a figure of 3.8%, Mabogunje et al.\(^1\) 4%, and we found parotid enlargement in 2 patients (8%).

Dysphagia is the commonest symptom of achalasia and occurs in nearly all patients; not infrequently the dysphagia is worse with liquids.\(^1\) Dysphagia was present in all our patients and in 56% the symptoms were worse with solids. Pain is a less common symptom and most European studies report that it occurs in about 30% of patients.\(^5\) Results in African studies have varied; Silber\(^4\) found pain to be an infrequent symptom (4%), Mabogunje et al.\(^8\) reported pain in 71% of patients and pain was a feature in 56% of our patients. The unusually high frequency of vomiting in our series (76%) may be explained by the fact that histories were often obtained through an interpreter and so discrimination between regurgitation and vomiting may have been poor.

There is a clear association between oesophageal disease and pulmonary infections; a patient with advanced achalasia may not complain of dysphagia but may present with respiratory symptoms.\(^9\) Chest infections occurred pre-operatively in 20% and postoperatively in 24% of our patients.

Haemorrhage is a rare symptom of achalasia\(^1\) and none of our patients were anaemic or gave a history of haematemesis.

The relationship between achalasia and oesophageal carcinoma is controversial but oesophageal carcinoma or carcinoma of the cardia may mimic achalasia. Davey\(^7\) stated that the radiological features of achalasia and oesophageal carcinoma could be indistinguishable and that in an area where oesophageal carcinoma was common, oesophagoscopy was mandatory before a diagnosis of achalasia could be accepted. This important principle has recently been reiterated.\(^10\) The patient in our study who was thought to have achalasia but was found to have oesophageal carcinoma illustrates this point.

REFERENCES