# Complications of traditional couching in a Nigerian local population

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### Summary

Aim: To evaluate the complications of traditional couching in a local population.

Method: New patients who had undergone couching and presented to the consultant outpatient clinic of the University of Benin Teaching Hospital and D.D.S. Eye clinic in Benincity between April 2002 and March 2003 were interviewed and examined by the author to identify the complications. Results: Eighteen eyes of 14 patients who had undergone couching were seen in Benin-city over a 1 year period. The cost of couching was similar to modern cataract surgery. Ten patients (71.42%) were initially satisfied but later became unsatisfied because of the complications and 2 (14.29%) were unsatisfied with the procedure. The main reasons for opting for couching were ignorance and fear of surgery. The main complications were secondary glaucoma (61.54%), hyphaema (15.38%) and optic atrophy (15.38%). Visual acuity of no light perception was seen in 33.33% of eyes mainly from secondary glaucoma but 50% of eyes had corrected visual acuity of 6/18 or better.

Conclusion: In view of the above complications, traditional couching should not be encouraged.

Key words: Couching, Complications, Blindness.

#### Résumé

*But:* Evaluer des complications du couching traditionel dans une population locale.

Methode: Des patients nouveaux qui avaient subi le couching et qui se sont présentés auprès du chef de service du service des consultations externes du centre hospitalier universitaire du Benin City entre avril 2002 et mai 2003 avaient subi un entretien et ont été examiné par l'auteur afin d'identifier les complications.

Résultats: Dix huit yeux de 14 patients qui avaient subi la chirurgie traditionnelle de couching ont été vus à Benin au cours d'une durée d'une année. Le coût de couching était semblable au frais de la chirurgie moderne de la cataracte (IOL). Les résultats de dix patients soit 71,42% étaient au départ satisfaisants mais plus tard devenus non satisfaisant à cause des complications et 2 soit 14,29% étaient non satisfaisants par suite de cette méthode.

Les raisons principales qui provoquent ce couching étaient l'ignorance et peur de subir la chirurgie. Les complications principales étaient glaucome secondaire 61,54% hyphéma 15,38 et atrophie optique 15,38%. Acuité visuelle d'aucune perception de lumière était vu dans 33,33% des yeux principalement à travers le glaucome secondaire mais 50% des yeux avaient eu acuité visuelle corrigée de 6/18 ou mieux.

Conclusion: Par suite de ces complications citées ci-dessus, on doit décourager le couching traditionnel.

## Introduction

Couching is a common traditional procedure for the Correspondence

treatment of blinding cataract especially in Northern Nigeria and elsewhere in West Africa. 1.2

An extensive network of couchers, mainly nomadic Fulani, perform couching. Two methods of couching are reported:<sup>3,4</sup>

- (a) The 'sharp' method: The eye is perforated and lens is pushed backwards by a sharp instrument.
- (b) The 'blunt' method: The lens is pushed backwards into the vitreous, either by massage or possibly by a 'magic drop', which may cause zonulysis.

A number of ophthalmologists will be rightly skeptical, if not frankly hostile to the notion of involving traditional healers in the blindness prevention activities. Although it has been shown that traditional eye medicines and couching can cause blindness, <sup>1.8</sup> the magnitude of the problem is not known. There are no population-based estimates of traditional eye medicine use or couching nor data comparing the frequency of good versus poor outcome. Most of the studies available are hospital based where the complications are seen.

This study will review some cases of couching seen in Benin-city and evaluate its complications.

## Patients and methods

New patients who had undergone couching and presented to the consultant outpatient clinic of the University of Benin Teaching Hospital and D.D.S. Eye clinic in Benin-city between April 2002 and March 2003 were interviewed and examined by the author.

The demographic data such as age, sex, occupation, religion and educational status were recorded. The patients were asked how long ago the procedure took place, who performed it, the cost of the procedure and the presenting complaints as well as how long after the procedure they developed any problems. They were also asked if any postoperative medication were given and if they were satisfied with the procedure.

The visual acuity using the Snellen's chart was done. When this was not possible because of poor vision, the ability to count fingers at varying distances, hand novement or light perception was recorded. The vision was also tested using a +10 dioptre sphere lens and when possible the best corrected vision after refraction was recorded. The anterior segment was examined using a pen torch and Goldmann's slit lamp biomicroscope. The fundus was examined using the Keeler's direct ophthalmoscope and the intraocular pressure measured with the Goldmann applanation to cometer.

#### Results

Eighteen eyes of fourteen patients who had undergone couching were seen. There were 10 males and 4 fen ales. The mean age was 59.85 years with a range of 39 years to 76 years.

Six patients (42.86%) were illiterate, 3 (21.43%) had primary education and 5 patients (35.71%) had secondary

Table 1 Complications in couched eyes

Complications	Frequency	Percentage
Secondary glaucoma	8	61.54
Hyphaema	2	15.38
Optic atrophy	2	15.38
Phthisical globe and total	1	7.69
Hyphaema		
Total	13	100%

Table 2 Visual acuity in couched eyes at presentation

Visual acuity	No. of eyes	Percentage
NLP	6	33.33
HM	0	0
CF < 3m	11	61.11
$CF \ge 3m$	1	5.56
Total	18	100%

Table 3 Visual acuity in couched eyes after opitical correction

Visual acuity	No of eyes	Percentage
NLP - <3/60	7	38.89
3/60 - <6/60	2	11.11
6/60 - < 6/18	0	0
6/18 - better	9	50.0
Total	18	100.0%

education. Seven patients (50%) were farmers, 1(7.14%) was a fisherman and 6 (42.86%) were pensioners.

The length of time between couching and presentation ranged from 3 months to 36 years. The cost of couching ranged from US\$100.00 to US\$160.00 per eye (about N10,000.00-N 16,000.00 at that time). The lowest charge for unilateral couching was US\$120.00 and for bilateral couching it was US\$200.00. The presenting complaint was poor vision in 12 cases (85.71%) with two patients asking specifically for glasses while 2 patients (14.29%) presented with pain. Two patients (14.29%) expressed satisfaction with couching, 10(71.42%) were initially satisfied but later became unsatisfied because of the complications and 2 (14.29%) were unsatisfied with the procedure.

The reasons why the patients chose to undergo couching include ignorance of the availability of surgical correction in 6 patients (42.86%), fear of surgery in 6 patients (42.86%) while 2 patients (14.29%) preferred traditional procedures. Of the 18 eyes, 13 (72.22%) had various complications while 5 (27.78%) had no complications yet. The various complications seen are shown in table 1. The presenting visual acuity is shown in table 2 and the visual acuity after optical correction is shown in table 3. Seven eyes (38.89%) actually had good vision of 6/9 or better after spectacle correction.

Three patients had couching in one eye and intracapsular cataract extraction in the other. In two cases the vision was equal in both eyes and in the third case, the vision in the couched eye was no light perception (NLP) while in the eye with intracapsular cataract extraction, the vision was 6/9 after correction. There was no reported use of drugs after couching.

## Discussion

Couching has been practiced since 1000BC to 500BC in India. The technique is secret and people cannot witness it. The stated advantages are low cost, simple technique using

locally available instruments; it is performed in the villages where the patients live and it is culturally and religiously acceptable.<sup>4</sup>

The majority of patients were elderly rural dwellers of low educational status. Couching was performed in the environment where the patients lived in all cases. The procedure was carried out by 'mallams' of northern extraction, which is similar to the findings in other studies.<sup>3,4</sup> In two cases, the patients presented their clinic cards, which showed that some of these couchers have organized themselves into networks with offices nationwide. On one of these cards was written, "United to cure and prevent blindness in the World: SOS Foundation, Netherlands" with headquarters in Yola, Adamawa state and branches in Abia, Imo, Rivers, Bauchi, Lagos and Delta states of Nigeria.

The cost of couching is reported to be low and payment may also be in kind.<sup>34</sup> However in this study the cost of couching was comparable to modern cataract extraction. At the time most of the couching in this study was performed, the total cost of cataract surgery in the University of Benin Teaching Hospital, was about US\$100.00 per eye inclusive of surgery, admission and drugs.

The reasons for presentation to the clinic were poor vision and pain. The majority of patients later developed poor vision or pain. This is in agreement with the finding that pain is a major worrying symptom. The majority of patients with complications had secondary glaucoma. Indeed 5 of the 6 patients with no light perception had secondary glaucoma while the 6th patient had a phthisical globe with total hyphaema.

Ignorance of the availability of modern surgical procedures for cataract and fear of surgery were the major reasons given by patients for opting for couching. Fear of surgery has been reported as a major cause of refusal of glaucoma surgery in Nigeria. 9,10 The problem of low acceptability of ocular surgery also exists with cataract surgery. It has been reported that the main barrier to having cataract surgery in a rural community in Northern Nigeria was inability to afford treatment.<sup>2</sup>

Endophthalmitis is frequently reported as a complication of couching.<sup>3,4</sup> In this study no case of endophthalmitis was seen. This is similar to the finding at Korle-Bu Teaching Hospital.<sup>11</sup> Endophthalmitis is presumed to be due to use of unsterile instruments in the sharp method of couching. It is possible that the blunt method was used for most of these cases accounting for the absence of endophthalmitis in this study.

Retinal detachment has also been reported following couching.<sup>3</sup> This is because the couchers do not understand the anatomy of the pars plana and do not know where to introduce their instrument. Furthermore, trauma to the globe in the blunt method may be severe enough to cause retinal detachment.

Some authors have recommended the outright ban of couching describing it as a blinding menace.<sup>3</sup> However no legislation banning couching has since been passed. Although there is some improvement in visual acuity in some of these patients which is in agreement with other reports<sup>2,11</sup> the level of complications is still unacceptable.

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