

# Socio-cultural Beliefs in the Management of Preauricular Sinus

A Adeyemo, G Ijaduola

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## Abstract

Background: Preauricular sinuses (PS) are usually asymptomatic but recurrent infections may occur. Sociocultural beliefs appear to affect its management.

Aim: This study aims to evaluate impact of sociocultural beliefs on management of PS.

Method: Cases of PS seen at the ENT clinic of University College Hospital, Ibadan between January 2001 and December 2005 were evaluated for demographic data, social class, clinical profile, treatment modalities and cultural beliefs.

## Results:

There were 10 males and 6 females with ages between 1.5 years to 45 years. Symptoms ranged between 4 days and 10 years. Twelve (75%) patients were in social classes III-V. All patients had recurrent painful preauricular swelling and gained symptomatic relief with antibiotics. Only 1 patient had excision. Patients who believed in supernatural powers of PS refused surgery.

## Conclusion:

Importance of sociocultural belief is shown in surgery refusal because of hope in the myth of PS guiding to wealth.

## INTRODUCTION

Preauricular sinus also called preauricular pit, preauricular fistula, is a benign congenital malformation. The first published report was in 1864<sup>1</sup>. The incidence in some areas of Africa was estimated at 4–10%<sup>2</sup>. Usually asymptomatic, it is noted during routine ear, nose and throat examination, though it can present as an infected and discharging sinus. Theories of origin of preauricular sinus includes: defective or incomplete fusion of the six auricular hillocks<sup>3</sup>; relics of incomplete closure of the dorsal part of the first pharyngeal groove<sup>4, 5</sup>; and development from isolated ectodermal folds during auricular development<sup>6</sup>. It has been suggested that preauricular sinus are markers of teratogenic exposure<sup>7</sup>. Management of the infected preauricular sinus involves administration of appropriate antibiotics and incision and drainage where an abscess is present<sup>8</sup>. Among the Yoruba of south-western Nigeria there is a widespread belief that the presence of preauricular sinus in an individual will confer supernatural abilities to become rich.

## METHODS

The study was based on the cases that presented with discharging preauricular sinus between January 2001 and December 2005 at the out patient clinic of the ENT department of the University College Hospital, Ibadan, only patients that belonged to the Yoruba tribal group were included in the study population. The information sought for were: age, sex, history/physical findings and cultural beliefs. The socioeconomic class was determined based on the occupation and educational attainment of the patient or parents<sup>9</sup>.

## RESULTS

A total of 16 patients with symptomatic preauricular sinus were enrolled in the study. The age of the patients varied between 1.5 years and 45 years (mean age is 19.3 years, median age is 20.5 years). There were 10(62.5%) males and 6(37.5%) females. The duration of symptoms varies between 4 days and 10 years (mean duration was 3.2 years, while median was 2 years). Twelve patients were in social classes

III to V.

**Figure 1**

Table 1

Social class	Number
I	2
I	2
III	4
IV	5
V	3

The fistulas were located equally on the right and left side. 2(12.5%) patients had bilateral preauricular sinus.

All patients presented with fistulas that had become symptomatic.

**Figure 2**

Table 2

Preauricular Swelling	16
Purulent discharge	15
Fever	4

They all had tenderness over the sinus. Bacterial organisms were isolated in 2(12.5%) cases. The species identified was *Staphylococcus aureus*. Five (31%) patients improved symptomatically with antibiotics, 3(18%) had incision and drainage, while 1 (6.25%) patient had surgical excision; others were managed with daily dressing with Eusol/honey.

**DISCUSSION**

12.5% of the patients had a bilateral sinus. The corresponding figures in the literature vary between 17% and 47%<sup>10, 11, 12</sup>. 87.5% of cases seen were unilateral as compared with over 50% reported by W.O'Mara and L. Garisco<sup>13</sup>. L.J. Paulozzi and J.M. Lary<sup>14</sup> reported preauricular sinus to be commoner on the right but right and left affectation were equal in our study.

The commonest presenting complaint was recurrent preauricular swelling (100%). This is similar to what was documented by Emery and Salaman<sup>15</sup>.

Discharge was observed in over 93% which compares to what Maik et al. reported<sup>16</sup>. Pain was present in all cases. Other symptoms includes: itchy ears (6%), fever (25%), and tinnitus (12%). Two (12%) patients had hearing loss.

Preauricular sinus has been described as part of a number of syndromes which includes hearing loss<sup>17, 18</sup>. Two patients had associated suppurative otitis media. The identified pathogen causing infection was *Staphylococcal* species<sup>8, 19</sup>. In our patients we found only *Staphylococcal aureus*. It must be noted that a lot of patients have used various antibiotics bought over the counter before presenting in the hospital.

**CULTURAL BELIEFS**

It has been shown that despite availability of healthcare services certain disease specific and non- disease specific

socio-cultural beliefs may influence the health seeking behaviour of the populace. Health services maybe underutilised and healthcare instructions ignored in societies where people's cultural beliefs conflict with the knowledge passed to them.<sup>20, 21</sup>

Ethiopians believe health is equilibrium between the body and the environment. They believe blowing winds cause pain wherever they hit and excess exposure to sun leads to skin disease. Sexually transmitted disease is attributed to urinating under a full moon<sup>22</sup>. Among Chinese women there is a belief that diet is responsible for breast cancer and its recurrence<sup>21</sup>. South East Asian women from Vietnam, Cambodia and Laos practise a dermabrasion therapy to treat a variety of illness<sup>23</sup>. Duruma mothers in rural Kenya practises exorcism to heal their sick children<sup>24</sup>. In Yoruba land, Nigeria, curative measures adopted by a mother for measles, diarrhoea and fever may depend on whether the sick child is believed to be an "abiku" (special children who have come from the spirit world and can die at will unless certain rituals are performed) or not<sup>20</sup>.

Non adoption of modern curative measures cannot be attributed to poverty alone but due to cultural and social determinants of behaviour<sup>25</sup>. Several authors have emphasised the need to consider the cultural beliefs and practises of people when designing measures aimed at improving their health<sup>26, 27</sup>. The need for health planners to understand the culture of their population arises from the fact that the measuring of illness and behavioural responses to illness are basic factors influencing the reaction of the public health programs<sup>26</sup>.

All patients in the study group gained symptomatic relief with antibiotics use, though the patients were all scheduled for surgery as the definitive treatment modality<sup>19</sup> only 1 patient accepted surgical excision despite the recurrent nature of symptoms and adequate counselling. This can be explained on the basis of the beliefs among the population about the supernatural abilities of preauricular sinuses to confer wealth. This belief is strong in both sexes. Excision of the sinuses at surgery will rob them of these abilities. The patients avoid hospitals after gaining some relief.

It appears from our study that symptomatic preauricular sinus is commoner among the lower social classes. These categories of people are also more likely to hold on to myths about wealth. The possibility of associated abnormalities must not be overlooked as this will allow optimization of the care of the patient.

## CONCLUSION

The socio-cultural beliefs alter the way of lives of humans. The importance of socio-cultural belief in surgical management of this disease is shown in the failure of all those who believe in the power of the presence of preauricular sinus to agree to surgery. The only patient who did not share the belief agreed readily for surgical excision. It is therefore important for health educationists should be encouraged to reach out to people to have maximal benefits of various treatment options available for any disease.

## CORRESPONDENCE TO

Dr. AA Adeyemo Department of Otolaryngology, University College Hospital, P.M.B. 5116, Ibadan, Nigeria.  
adebolajo@yahoo.com +234 803 717 2329

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**Author Information**

**Adebolajo Adeyemo, FWACS**

Department of Otolaryngology, University College Hospital

**Gbolagunte Ijaduola, Ph.D.**

Department of Otolaryngology, University College Hospital