

## ISSN 2073-9990 East Cent. Afr. J. surg



Hydrocoele: A Silent Disability Affecting Quality of Life in Katakwi District in Uganda.

## N. Kakembo<sup>1</sup>, S. Kirunda<sup>1</sup>, J. Yiga<sup>1</sup>, I. Kikwabanga<sup>2</sup>.

<sup>1</sup>Department of Surgery, School of Medicine, Makerere College of Health Sciences, Kampala Uganda.

<sup>2</sup>Medical Officer, Katakwi General Hospital, Eastern Uganda

Correspondence to: Nasser Kakembo, Email: kakembon@ymail.com

Background: Katakwi district is one of the rural districts in eastern Uganda in Teso Sub Region. The district is heavily infested with filarial worms a major cause for hydrocoele and elephantiasis if the infection is left untreated. Hydrocoele in Katakwi district are still a big cause of silent morbidity though it's an operable condition with good outcome. Individuals affected with large hydrocoele are socially withdrawn, with inability to walk and work, leading to severe poverty to the extent that they cannot afford to pay for surgery and basic needs in their lives This is also associated with a negative impact on their sexual lives with broken marriages

Methods: Between 12<sup>th</sup> and 16<sup>th</sup> August 2013, a surgical camp was organized in Teso Sub Region during which free surgery was offered to patients suffering from surgical conditions.

Results: A total of 400 patients reported and were screened. Of these, 90 patients were booked for surgery but only 57 patients were operated during the camp. Their ages ranged from 5 to 75 years, of the 57 patients who were operated on, 23 had hydrocoele 5 of them presenting with had bilateral hydrocoele while 3 patients had concurrent hydrocoele and hernia.

Conclusion: The prevalence of hydrocoele in Katakwi district is high and it's a big ccausese of silent morbidity and disability'

Key words: Hydrocoele, Surgical camp

### **Background**

Katakwi district is one of the rural districts in eastern Uganda in Teso Sub Region. The population is majorly of subsistence farmers that grow rice, sorghum and millet in water logged low lying areas. The district is heavily infested with filarial worms a major cause for hydrocoels and elephantiasis if the infection is left untreated. The worms are called Wuchereri bancrofti and are spread by mosquitoes<sup>1, 3</sup>. Hydrocoele is a scrotal condition that grows steadily but painless. It may become excessively big with affected individuals being socially withdrawn, with inability to walk and work<sup>2,6</sup>. If un-operated there is a remote association of chronic hydrocoel wit testicular and Para testicular cancer though more studies are required in black Africans<sup>5</sup>.

### **Patients and Methods**

The patients were worked on during the Assocition of Surgeons of Uganda (ASOU) surgical camp held in Teso Sub Region from  $12^{th}/08/2013$  to  $16^{th}/08/2013$ . The camp was held in the ten districts making the sub region Katakwi being one of them. The patients were screened as they came and prepared for surgery.

## **Results**

A total of 400 patients were screened, these included children with congenital anomalies, women with gynaecological conditions and some patients with purely medical conditions, 90 cases were booked for surgery and 57 patients were operated during the five days the camp lasted depending on the severity of the condition. The age range for patients operated was 5 to 75 years. Of the 57 patients worked on at Katakwi hospital, 23 patients had hydrocoele operated under spinal anaethesia and of those, 5 had bilateral hydrocoele, 3 had concurrent hydrocoele with at least an inguinal hernia, 1

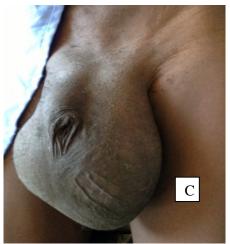






patient had bilateral inguinal hernias and bilateral hydrocoele. Other cases included 13 inguinal hernias, lipomas, keloids abscesses and cysts.





Figures 1A,B,C. Photos of some of the patients who were operated for hydrocoele

Table 1. The Distribution Surgical Conditions among Operated Patients

Surgical condition	Number of patients
Unilatera Hydrocoele (one side)	14
Bilateral Hydrocoele	5
Concurrent Hydocoele and Hernia	3
Bilateral Hydrocoele and Bilateral Hernia	1
Unilateral Inguinal Hernia	13
Others	21
(lipomas, ganglion, cysts, in growing toenails and abscesses)	
Total	57



## ISSN 2073-9990 East Cent. Afr. J. surg



During the hydrocelectomy about 500 to 1000ml of serous fluid was drained from either hem side and most of them had stayed with hydrocoele for over 5years. Operated patients were reviewed by the local doctor in Katakwi hospital, and by three weeks after the camp, all the patients had been healed un eventfully except two individuals. One patient with a giant hydrocoele developed wound sepsis with dehiscence of the scrotal suture line that was successfully managed with dressing. The other, was a patient with bilateral hydrocoel and bilateral hernias who developed urinary retention 24 hours after surgery that was managed with an indwelling urethral catheter for one week. No scrotal haematomas was reported probably due to meticulous haemostasis.

#### Discussion

Hydrocoeles are common in this region because they are of infectious cause and the place has a lot of water bodies with swamps used for cultivation of rice. The water bodies are infested with filarial worms that cause hydrocoele <sup>3</sup>. Hydrocoele in Katakwi district is still a big cause of silent morbidity though it's an operable condition with good outcome<sup>4</sup>.

Once one develops a giant hydrocoele the reaction is to get withdrawn from the public and social gathering for fear of stigmatization and resort to excessive abuse of alcohol and lack of self care, though some sections of the population believe that it's prestigious for man to have big hydrocoele. The patients tend to abandon work places and become less productive because of the excessive weight of the scrotum. The problem is compounded by poverty to the extent that they cannot afford to pay for the surgeries and basic needs in their lives<sup>5</sup>. This is also associated with a negative impact on their sexual lives because of the inconvenience caused by the masses and most of the time the penis is swallowed in the hydrocoele with broken marriages<sup>2</sup>. Because the penis is swallowed up patients find it difficult to clean themselves after urinating in that the urine just flows over the scrotum without penile support and soils their clothes.

As noted during the surgical camp, most of the hydrocoele were more than 5 years in existence, it s of paramount importance to closely follow up the patients for fear of the cancers associated with long standing hydrocoele<sup>5</sup>.

### **Conclusion**

The prevalence of hydrocoele in Katakwi district is high and it's a big cusse of silent morbidity and disability.

## Recommendations

We recommend the following:

- To conduct regular case specific surgical camps in the district to operate on the patients with such giant hydrocoele.
- To strengthen the mass treatment for the filarial worms that causes hydrocoele
- Health education in order to reduce on stigmatization and encourage early surgery.
- Building capacity for local doctors to develop skill in performance of hydrocoelectomy.
- Integrating hydrocoele surgery in programs like mass circumcision that are already running in the distinct.
- Strengthen the use of insect repellants and reduce on mosquito bites.

### References

1. Neglected diseases targeted in Katine village. Joseph Mugisha, theguardian.com Tuesday 21 April 2009.



# ISSN 2073-9990 East Cent. Afr. J. surg



- 2. E. E. Akpo. Giant hydrocoel –an epitome of neglect. African health sciences 2005 December, 5(4); 343-344.
- 3. Simonsen P.E., Meyrowitsch D.W., Makunde W.H., Magnussen P. Bancroftian filariasis ;the pattern of microfilaraemia and clinical manifestations in three endemic communities of northeastern Tanzania. Acta Tropica 1995; 60(3):179-187).
- 4. Thomas G, Richards FO Jr, Eigege A et al. Apilot program of mass surgery weeks for treatment of hdrocoel due to lymphatic filariasis in central Nigeria. The American Journal of Tropical Medicine and Hygiene 2009; 80(3): 447-451.
- 5. Chukwud O. Okorie, Louis L.Pisters, and Pig Liu. Long standing hydrocoel in adult Black Africans; Is preoperativescrotal ultrasound justified? Niger Med J.2011 Jul-Sep; 52(3):173-176
- 6. Mwobobia I.K., Munju E.M, Kombe Y, Wamae C.N. Hydrocelectomy: a proxy for hydrocoele prevalence in coastal Kenya. Ann Trop Med 2000 Jul; 94(5):479-84