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

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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 Individuals affected with large hydrocoele are socially withdrawn, with inability to walk and work, leading to severe poverty to the extent that they cannot afford to pay for surgery and basic needs in their lives.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 12th and 16th 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 cause 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.¹, ³ 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 It may become excessively big with affected individuals being socially withdrawn, with inability to walk and work.²,⁶ If un-operated there is a remote association of chronic hydrocoel with testicular and Para testicular cancer though more studies are required in black Africans.⁵

Patients and Methods

The patients were worked on during the Association of Surgeons of Uganda (ASOU) surgical camp held in Teso Sub Region from 12th /08/2013 to 16th /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 anaesthesia 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

<table>
<thead>
<tr>
<th>Surgical condition</th>
<th>Number of patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unilatera Hydrocoele (one side)</td>
<td>14</td>
</tr>
<tr>
<td>Bilateral Hydrocoele</td>
<td>5</td>
</tr>
<tr>
<td>Concurrent Hydrocoele and Hernia</td>
<td>3</td>
</tr>
<tr>
<td>Bilateral Hydrocoele and Bilateral Hernia</td>
<td>1</td>
</tr>
<tr>
<td>Unilateral Inguinal Hernia</td>
<td>13</td>
</tr>
<tr>
<td>Others (lipomas, ganglion, cysts, in growing toenails and abscesses)</td>
<td>21</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>57</strong></td>
</tr>
</tbody>
</table>
During the hydrocelectomy about 500 to 1000ml of serous fluid was drained from either hem side and most of them had stayed with hydrocele for over 5 years. Operated patients were reviewed by the local doctor in Katakwi hospital, and by three weeks after the camp, all the patients had been healed uneventfully except two individuals. One patient with a giant hydrocele developed wound sepsis with dehiscence of the scrotal suture line that was successfully managed with dressing. The other, was a patient with bilateral hydrocele 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**

Hydroceles 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 hydrocele. Hydrocele in Katakwi district is still a big cause of silent morbidity though it’s an operable condition with good outcome.

Once one develops a giant hydrocele 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 hydrocele. 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. 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 hydrocele with broken marriages. 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 hydrocele 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 hydrocele.

**Conclusion**

The prevalence of hydrocele in Katakwi district is high and it’s a big cause 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 hydrocele.
- To strengthen the mass treatment for the filarial worms that causes hydrocele.
- Health education in order to reduce on stigmatization and encourage early surgery.
- Building capacity for local doctors to develop skill in performance of hydrocelectomy.
- Integrating hydrocele surgery in programs like mass circumcision that are already running in the district.
- Strengthen the use of insect repellants and reduce on mosquito bites.

**References**