KALENE MISSION HOSPITAL MEDICAL NEWSLETTER. NOVEMBER 2011

Greetings from Zambia at the beginning of another rainy season.

Expanding work

The medical work of the hospital continues to expand with the surgical workload being twice as busy as four years ago. In 2011, we will complete approximately 800 intermediate/major operations and 1000 minor procedures. As well patients travellling from Eastern Angola (especially Kazombo, 280 km away), more patients are also coming from along the 'historic railway line' in the Congo (Mushatsha, Kolwezi). From within Zambia, a group of patients with established surgical problems are bypassing major hospitals to have their surgery at Kalene. This steady increase in the workload has meant that the help of others and the development of the medical team at the hospital has been essential.

Medical Staff

Over the last year we have been very fortunate to have three couples from UK helping for more than six months; Drs Paul and Katy Barker, Dr Chris and Emma Houlden (surgical registrar and nurse/midwife) and Drs Phil and Tess Bonnett (anaesthetic and O&G). We are very grateful for their help, which has made keeping up with the workload possible.

Both Kalene's Zambian doctors have been promoted to become District Directors of Health: Dr Kapaya for Ikelenge (our district) and Dr Chamileke for the Zambezi district. While this is an appropriate reward for them, it has meant that since June, Kalene hospital has been more dependent on mission doctors.

Dr Philip & Dr Tessa Bonnett, working at Kalene till July 2012

Meetings and Networking

On the administrative front John Woodfield has been involved in a number of meetings to improve the co-ordination between the "Christian Brethren" mission hospitals inside Zambia and also with affiliated groups in 'better resourced' countries. A medical board for the five hospitals in Zambia and a number of associated clinics has been formed. This was followed by a meeting with Zambian church leaders to discuss working more closely with trained Zambian staff. Outside Zambia, meetings have been held with interested parties in the UK and the medical mission work was presented at the IBCM5 conference in Strasbourg, France.

A number of issues have been explored. Some of these include looking at how we can more effectively help each other in terms of administrative issues, medico legal issues and training. There has also been discussion looking at medium term recruitment strategies such as sponsorship programs.

Building Programme

The new theatre block is progressing well. The roof is now completed. This was a major project including the construction and lifting of a series of steel roof trusses, which required a greater level of building expertise than we were able to provide locally. We are grateful that there was only one minor accident, and would like to thank Gordon McKillop for his supervision and help with the construction of the trusses and Rob Woodhouse from Brass Tacks for helping supervise the roofing.

The Roofing team

Lifting a welded roof truss for placement in new building

First truss being lifted into position

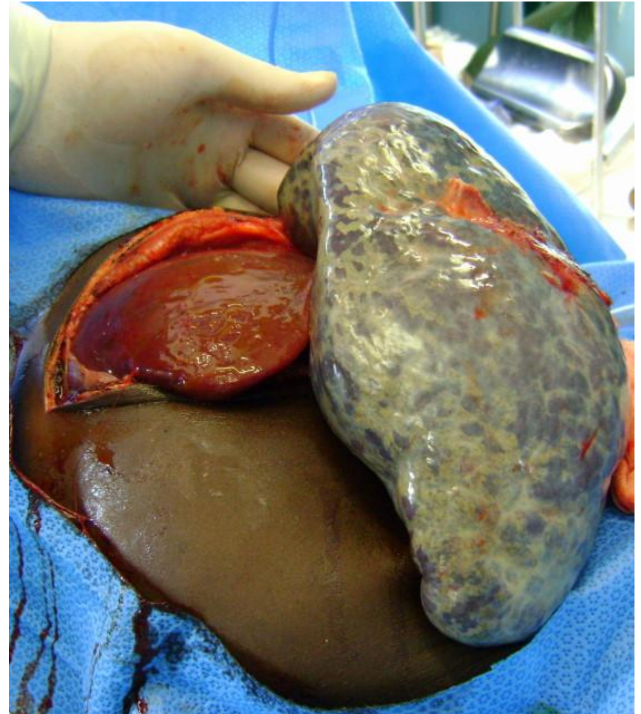
Interior of theatre section.

Placement of iron roofing sheets

Surgical Sign Off

Sickle Cell Anaemia complications

There continues to be a wide range of interesting and challenging cases. One such case was a six year old boy with severe sickle cell anaemia, who had massive splenomegaly and recurrent nose bleeds. Despite repeated transfusions his haemoglobin kept dropping to less than 5g/dl. Although some shortness of breath would be expected with his anaemia, his ejection systolic murmur made us concerned about an additional underlying cardiac pathology. Eventually we made the decision to proceed to a splenectomy. Because of the concern about intraoperative hypoxia (which can cause major sequestration problems in patients with sickle cell anaemia) we used a ketamine anaesthetic, with lots of dilute local anaesthetic. A rooftop incision made it possible to get access to the spleen without the small bowel obscuring the view. The lesser sac was able to be entered (but access was not sufficient to dissect out the splenic artery) and the short gastric vessels were taken before division of the rest of the gastrosplenic and the lineorenal ligament. He was able to be discharged with a haemoglobin of 8 and is doing well.

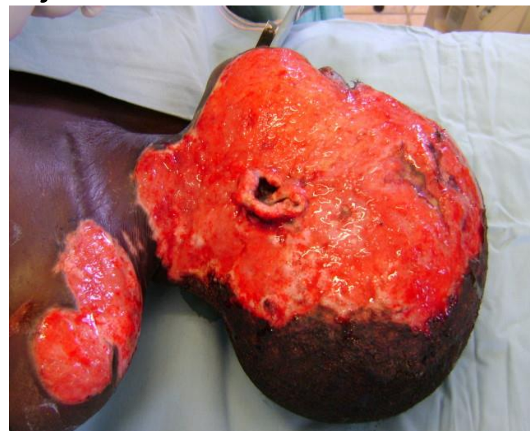


The spleen has a mottled appearance because of episodes of splenic sequestration caused by the sickle cell anaemia. Unfortunately these episodes were not associated with the spleen decreasing in size.

Burns

We are thankful that the number of burns cases this year have been fewer, but we do continue to see patients with particularly severe and/or disabling burns. This boy, who had a seizure and fell into a fire, lost almost all of the skin on one side of his face. Amazingly the skin graft that was applied directly onto the cartilage of the ear took. Once the skin graft had taken, the ongoing contracture formation from the underlying granulation tissue resulted in an ‘aggressive ectropium’ which formed rapidly over a period of five days, and ‘kept forming’ for a number of months! This required a series of full thickness skin grafts around the upper and lower eyelids.

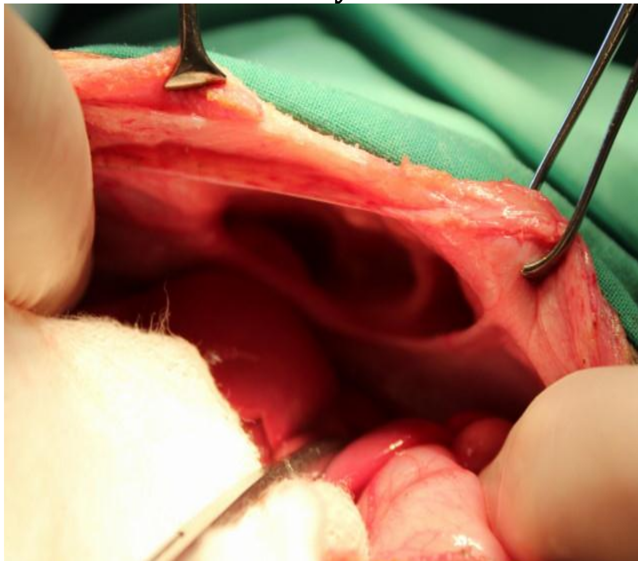
Before



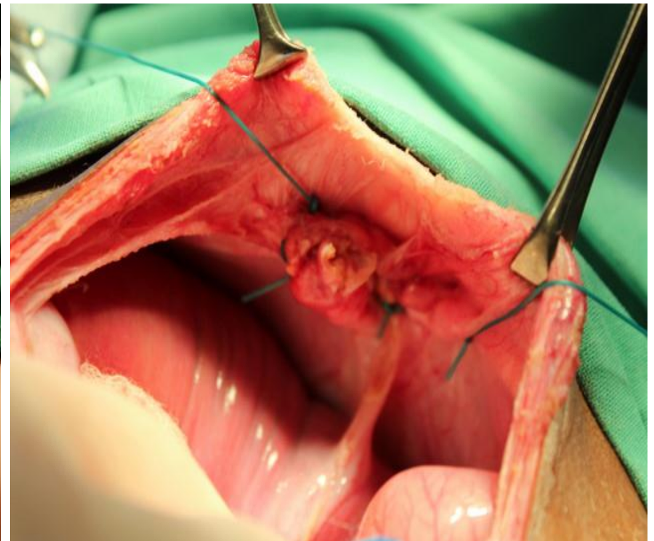
Four months later

Patient with Dr Chris Houlden.

Malnutrition secondary to hernia



Bilateral diaphragmatic hernia of Morgagni seen after reducing stomach and colon



After repair

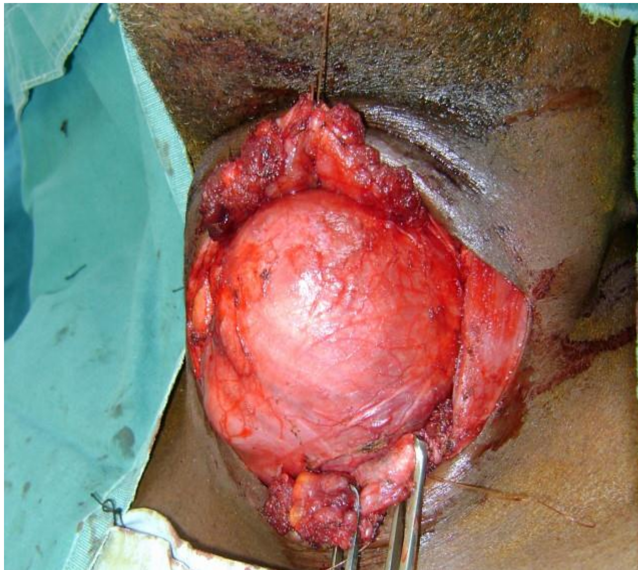
Malnutrition in children continues to be an ongoing challenge. Usually surgery is the last thing on one's mind when assessing such patients. However one two year old boy with poor weight gain and pain on eating had an interesting anterior diaphragmatic hernia on the lateral CXR. At surgery, again using a roof top incision, he had a bilateral diaphragmatic hernia of Morgagni which involved both the stomach and transverse colon. Although the defect was a significant size, the repair with interrupted 1 ethibond horizontal mattress sutures came together with minimal tension, and postoperatively his appetite and weight have significantly improved.

Thyroid Growths

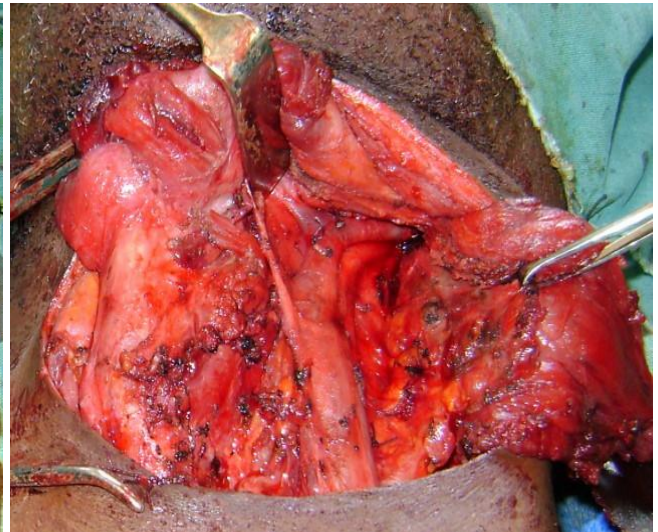
One result of having an increasing number of patients travel a long way to visit us is an increase in the number of thyroid operations. For example a lawyer with a large thyroid growth and massive nasal polyp disease presented from Livingstone (approximately 2000km way) a month ago.

In the following case, a 50 year old man from Congo presented with a unilateral swelling and bulky level II lymph node disease. Both lumps had increased rapidly in size over the previous

four months, leaving us in no doubt of the malignant nature of the disease. Following thyroid lobectomy (we did not do total thyroidectomy because there is no access to thyroxine or to radioactive iodine treatment in the area of Congo that he came from) a Level II to IV neck dissection was performed. The sternomastoid muscle was disconnected near its insertion into the stenum and clavicle and mobilised up to give good access to the Level II –IV nodes. The sternomastoid was then reattached. Histology showed an invasive Hurthle cell tumour.



Oblique view of neck showing the left sided thyroid mass after dividing the strap muscles. There is a separate soft tissue swelling near the angle of the jaw.

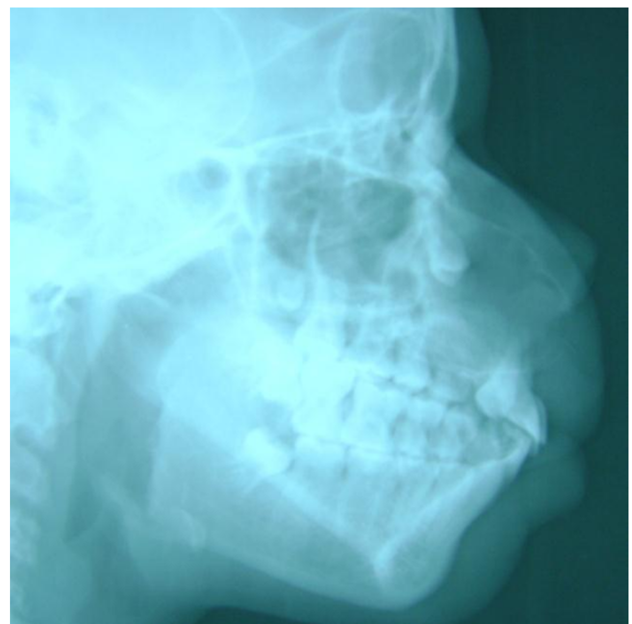


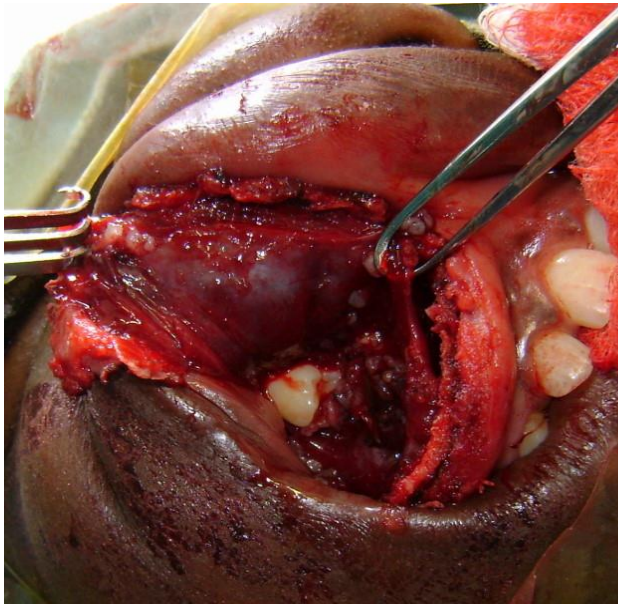
View after removal of thyroid and level II to IV nodes. In the centre is the internal jugular vein with the carotid artery being seen just behind it. Lateral to this is the cleared Level II area and the reflected sternomastoid muscle.

Odentogenic tumour

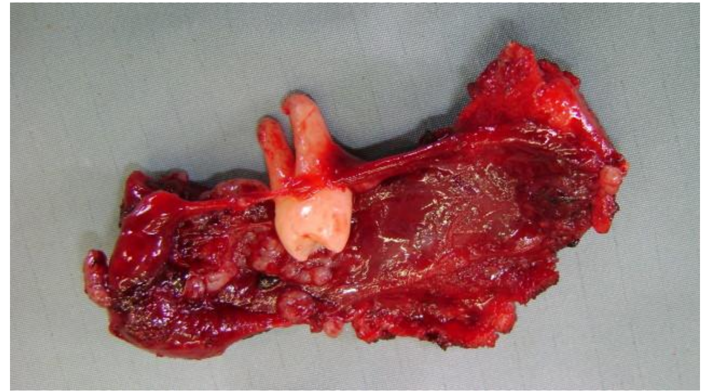
The 'wide catchment area' of the hospital also results in a range of cases with quite unusual or rare pathology. This 20 year old woman had unilateral facial/maxillary swelling increasing in size for one year. The xray showed an unerupted tooth in the apex of the mass, making us suspect a dentigenous cyst. Following advice we deroofed the cyst by removing the overlying maxillary bone (similar to a Caldwell-Luc approach for maxillary sinusitis), with care being taken not to get too close to the inferior orbital nerve. We were then able to dissect out the whole of the underlying cystic mass with the underlying unerupted tooth. Histology returned showing an adenomatoid odentogenic tumour, a benign lesion which surrounds the crown of an unerupted tooth and which therefore mimics a dentigerous cyst.

Right: Xray showing an unerupted tooth at the top of the cyst (crown of tooth at same height as the tip of the nose)





“Enculeation” taking the whole of the cyst wall and the unerupted tooth. Above the normal teeth is mucosa, then deroofed maxilla then the wall of the cyst (held in Allis forceps)



Specimen with wall and unerupted tooth

Wishing you all the best, and Gods blessing, for the Christmas season of 2011.

John Woodfield