

KALENE MISSION HOSPITAL MEDICAL NEWSLETTER September 2010

Kalene Hospital is continuing to develop with the help of many groups and individuals. Thank you all for your input and please enjoy the update below.

Kalene School of Nursing Graduation



The Minister of Health, the Hon. Dr Sambaio, unveiling the commemorative plaque.

The official reopening of the School of Nursing, and the first graduation ceremony was held on Friday 13 August. It was a pleasure to celebrate with the newly qualified nurses and to reflect on the development of the SON over the last few years. All 21 students who sat their final exam had passed. The ceremony was held in the Flight service hangar (the largest building at Kalene!) and was attended by about 300 people including the Minister of Health, Chiefs from the area around the hospital, representatives from the UNFPA, the General Nursing Council and many others.



View of the graduation ceremony

Arrival of Internet for hospital staff and Community



Arrival of the LinkNet Internet Container

The Linknet internet container was delivered in June. This donated resource has the potential to provide the whole institution with good quality internet. The first stage was to open an internet café for the public (the nearest café is in Solwezi over 250km away!). There are eight computer workstations in the container and the internet comes via a satellite connection. Users pay 100 kwacha per minute connected which goes towards staff wages and electricity charges. Free lessons on internet use have been provided as many people have never used a computer before. Connecting the hospital, nursing school and staff houses will be an ongoing project.

New Theatre Construction

The construction of a new theatre block has begun. The initial funding, which will cover two thirds of the price, was supplied by Beit Trust. The project includes three theatres, sterilisation and storage spaces and a six bed high dependency unit. This project is designed to help the hospital to look after sick patients more effectively, and it is hoped this will help attract staff who can help the hospital develop further. Other building projects include renovation of some hospital staff houses, which has been funded by the Laing Trust, UK.

Visitors

We are grateful for the help received Joanne Frampton, a pharmacist from New Zealand and from two visiting midwives, Bethany Wagler from USA and Heidi Beisly from New Zealand. Bethany and Heidi helped while the Reeds were on furlough in Australia.

The hospital is also helped by regular visits from specialists inside Zambia. Professor John Jellis, an orthopaedic surgeon, runs a service called FlySpec which visits approximately 15 hospitals across Zambia. Orthopaedic procedures performed include surgery for club foot, genu valgum, genu varus and a range of other procedures. FlySpec also provide a plastic surgical service. On the last visit with Dr Goran Jovic, we performed 13 operations over two days including five cleft lip procedures and a number of burn contractures. We have also benefited from the ongoing visits from Dr Edith Pola and her team from Operation Eyesight International.



Cleft lip surgery: before and after

Changes in government administration

In May the president of Zambia, Mr Rupia Banda announced the development of the new Ikelenge District. Although government funding of the hospital continues to be significantly reduced, (see last newsletter) Kalene Hospital will be the only hospital in the new district, and is well positioned to benefit from this initiative. The road, which has been in an appalling state for a number of years, and was almost impassable last wet season, is finally being graded.



Road or river? May 2010.

Cholera Outbreak

In April there was a cholera outbreak which was indirectly related to the poor road conditions. An Angolan truck travelling to Zambia broke down in an isolated area. The driver and passengers contracted cholera after drinking from a contaminated stream. One patient reached Kalene hospital, and there were six other patients with severe diarrhoea (including two children who died before reaching hospital). We were able to send a team to Jimbe, the rural health clinic next to the Angolan border, and isolated the patients there. After many litres of IV fluids and appropriate antibiotics all patients who reached the clinic recovered. Fortunately the isolation policy was successful in preventing the development of new cases.



Yet another Angolan truck stuck in a stream near Jimbe

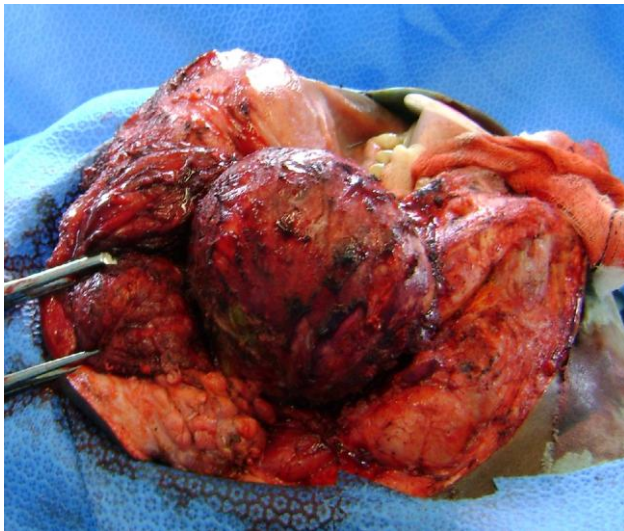
Surgical sign off

Ameloblastoma of mandible

This 45 year old man from Angola presented with an ameloblastoma arising from the ramus of the mandible. On this occasion there was some difficulty dissecting the tumour out from under the zygomatic arch. However the majority of the mandible was able to be preserved, and there was a good functional result without a formal reconstruction having to be performed.



Before



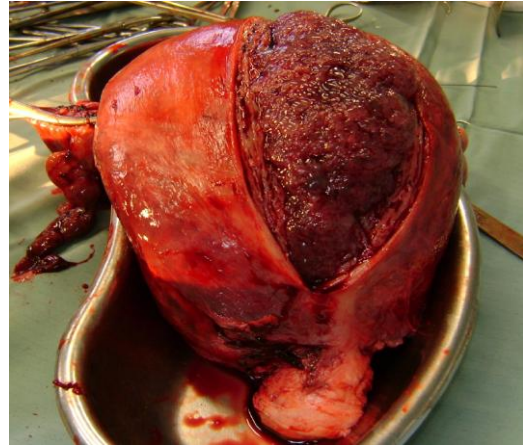
Lifting a flap from inferior to the marginal mandibular nerve and mobilising in the plane deep to the facial muscles. Some adherent deep muscle was removed enbloc with the tumour.



Result after resection

Advanced hydatidiform mole

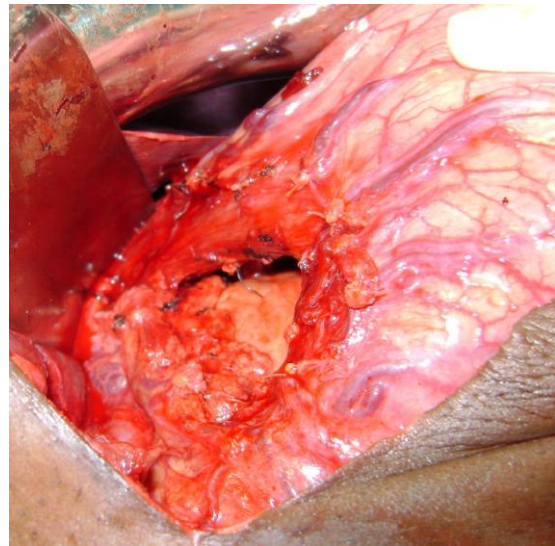
This 48 year old woman presented with a uterine mass at the level of the umbilicus. She had irregular PV bleeding, and a 'snow storm' appearance on ultrasound, suggesting the diagnosis of a hydatidiform mole. Surprisingly her pregnancy test was negative! In view of her age, the size of the mass, uncertainty about the diagnosis, and the potential risk of malignancy we proceeded to a TAH. Histology confirmed a complete molar pregnancy without any evidence of invasion.



Fundus of the uterus opening revealing the typical cysts of a hydatidiform mole

Highly selective vagotomy

One interesting aspect of work in Africa is the need to perform procedures that are now rarely performed in New Zealand. This is because of differences in both the pattern of disease and in resources. Examples include performing open transvesical prostatectomy (instead of TURP) and the more frequent use of traction following fractures. Another example is the treatment of gastric outlet obstruction caused by advanced chronic duodenal ulcer disease. Early diagnosis and effective *Helicobacter* eradication have made this an unnecessary procedure at home. In this case, a 40 year old man, who presented late with a gastric outlet obstruction had a gastrojejunostomy and enteroenterostomy (to divert bile away from the stomach) combined with a highly selective vagotomy (HSV). The photo shows the HSV, where the branches of the parasympathetic nerves which innervate the body and fundus of stomach are divided.

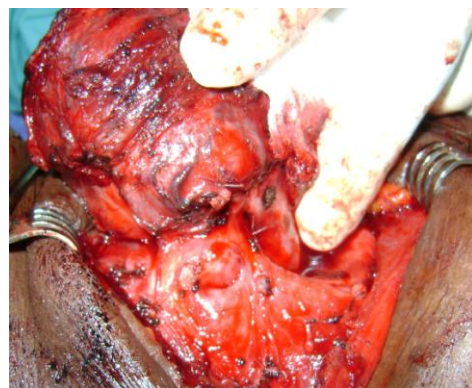


The mobilisation extends from the incisura, up the lesser curvature of the stomach and along the lower 6-8cm of the oesophagus

Thyroid cancer



Preoperative view of thyroid tumour



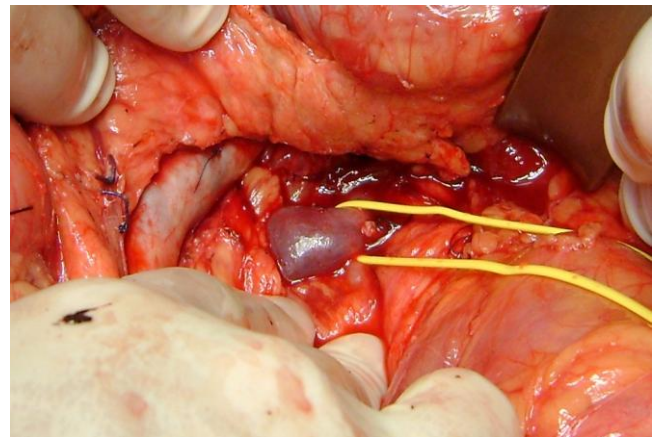
Thyroid carcinoma: Strap muscle removed en bloc. The fascia over the jugular vein is being pulled towards the thyroid (inferior part of the picture).

The number of thyroid cases seems to be increasing as the hospital's reputation for successful thyroid surgery is passed on. This patient presented with a histologically confirmed invasive follicular carcinoma. Fortunately there was no involvement of the recurrent laryngeal nerve.

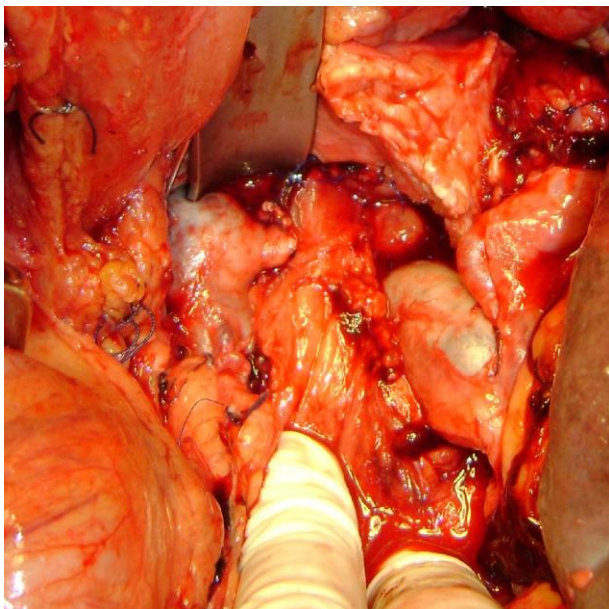
Regional variations in disease and distal splenorenal shunts

Throughout Africa there are marked regional variations in the pattern of disease. One reason is genetic differences, with some tribal groups having for example a high incidence of sigmoid volvulus. More often different disease patterns are caused by differences in the environment. At Kalene, we have many cases of malaria, but no schistosomiasis, sleeping sickness (trypanosomiasis) or leishmaniasis. The incidence of schistosomiasis is low because near the source of the Zambezi river there is rapid flow of water. However as the flow of water slows there is a dramatic change. The host snail of the schistosomiasis parasite becomes endemic, and schistosomiasis is a major health problem. At Chitokoloki Mission approximately 30% of school children have been shown (on ultrasound) to have typical changes of schistosomiasis in their liver. Many of these children will later present with chronic liver damage and portal hypertension. The most feared presentation is of massive haematemesis from oesophageal varices. Many of these patients do not reach the hospital. On my last visit to Chitokoloki I was able to team up with two other surgeons, Dr David McAdam (Chitokoloki) and Dr Andre Truter (World Medical Mission) to perform a distal splenorenal shunt.

This operation is designed to take high pressure venous blood away from the distal oesophagus, by disconnecting the stomach from the portal vein and by providing venous drainage through the spleen into the renal vein. The patient selected was a young mother who had recently had a major bleed. This is a formidable surgical challenge, especially when dissecting around the splenic vein behind the pancreas. There are many patients who require shunt surgery at Chitokoloki. It was pleasing that this patient's operation was successful, but the surgical risks and limited resources mean such operations cannot be routinely done. Regularly helping patients with this condition is a challenge for the future.



The renal vein is looped. The pancreas (top of picture) has been mobilised and the splenic vein is seen at its lower margin. The SMV is behind the surgeon's hand.



View behind the pancreas following the completion of the procedure. On the patient's right side the SMV and portal vein with the oversewn end of the splenic vein is seen. On the patient's left side the splenic vein has been mobilised and is now anastomosed to the renal vein (the renal vein cannot be seen). The structure just above and lateral to the splenic vein is the tortuous splenic artery. The medial edge of the enlarged spleen is lateral to this.

Best wishes from Kalene Mission Hospital,
John Woodfield