DEPARTMENT OF SURGERY ANNUAL REPORT 2012

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VISION

A centre of choice for quality training, innovative research and policy development for the production of world-class surgeons and surgical health care providers.

MISSION

To train high calibre surgical professionals, carry out creative, innovative and inventive research in current and emerging challenges, set and apply international standards in evidence and science based surgical healthcare provision, and be at the forefront of surgical policy formulation.

CORE VALUES

- Strive to be a leader in surgical training, surgical research and surgical practice locally, regionally and internationally
- Espouse and impart the virtues of professional ethics and moral standards in training, research and practice
- Promote evidence based health care provision
- Promote research
- Promote teamwork
- Nurture responsible professionalism through a culture of mentorship
- Promote sensitivity and responsiveness to the community and its environmental needs
- Promote gender sensitivity in training, research and practice
- Promote optimum utilization of resources in surgical training, research and practice
- Encourage and champion continuing medical education

DEPARTMENTAL MANAGEMENT TEAM

Chairman; Prof Stephen W.O. Ogendo

Thematic heads; Prof. Nimrod J. Mwangombe (neurosurgery)

Dr. J. Githaiga (General surgery)

Dr. Stanley O. Khaninga (Plastic Reconstructive and Aesthetic

Surgery)

Dr. Tom M. Omulo (Thoracic and Cardiovascular Surgery)

Dr. Joseph M. Ndungu (Paediatric Surgery)

Dr. Patrick R. Olang (Anaesthesia)
Dr. Peter Ndaguatha (Urology)

Administrative assistant; Mr, Stephen Mulwa

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MESSAGE FROM THE CHAIRMAN

INTRODUCTION

The history of the department dates back to the inauguration of the medical school in 1968.

The department has groen significantly since and produced many pioneers for this country. The department has also been associated with many firsts e.g. heart surgery and kidney transplants to mention a few.

The department has graduated more than two hundred graduants. These grandaunts today serve not only in the country but internationally in top government institutions and organisations like the world Health Organisation.

Department of surgery continues to be a leader in academics within the country. In this role it has initiated the development of many new programmes that are anticipated to be operational by 2013. Plans are underway to initiate a master's programme in Urology.

University expansion continues and it is possible the separation of the department of anaesthesia as a fully-fledged and independent department will be completed before the end of 2013. This separation will provide them with the required autonomy to expand and further broaden their programmes.

Academic staff continue to serve in many of the College activities.

HUMAN RESOURCE

The department of surgery is the largest department in the university with 55 members of staff consisting of;

Academic staff	Number	Support staff	Number
Professor	5	Administrative assistant	1
Ass. Professor	6	Secretaries	2
Senior lecturer	4	Support staff	2
Lecturer	26		
TF	13		
TOTAL	54		5

In addition to the academic staff listed above, surgeons from the main Kenyatta national Hospital also participate in teaching activities.

FUNDING AND FINANCIAL MANAGEMENT

The department met its recurrent expenditure through University capitation.

Funds are allocated into two main votes; teaching and equipment and furniture and office equipment.

The funds were managed as per College/ University financial regulations and other statutory requirements.

Vote	Amount (2011/2012)
Teaching and office expenses	564,400
Traveling and transport expenses	0
Furniture and office equipment	155,775.46

In addition the department received approximately 800,000 (2012) from the dean's office for improvements in the departmental. This funding went into the seminar room and purchased and automated LCD system and computers for the departmental computer laboratory.

ACADEMIC PROGRAMMES

The department of surgery continues to teach undergraduate MBChB and BDS students for the School of Medicine.

Programmes currently offered by the department of surgery are diploma, masters and PhD programmes.

- 1. Bachelor of Medicine Bachelor of Surgery
- 2. Bachelor of Dental Science
- 3. Master of Medicine in General Surgery (3 year programme gradually being phased out)
- 4. Master of Medicine in General Surgery (New 5 year programme)
- 5. Master of Medicine in Neurosurgery (6 year programme)
- 6. Master of Medicine in Anaesthesia (3 year programme)
- 7. Diploma in Clinical Audiology and Public Health Otology

The department recently completed review of the following programmes and as of the end of December were awaiting Senate approval.

- 1. Master of Medicine in Paediatric Surgery (5 year programme)
- 2. Master of Medicine in Thoracic and Cardiovascular Surgery (5 year programme)
- 3. Master of Medicine in Paediatric Surgery (5 year programme)
- 4. Master of Medicine in Anaesthesia (4 year programme)
- 5. Fellowship in Paediatric Anaesthesiology of the University of Nairobi (1 Year fellowship)
- 6. Diploma

ADMISSIONS

For the various programmes offered I the department admissions of new candidates for 2012 were;

•	MMeD General surgery	9
•	MMeD neurosurgery	1
•	MMeD ENT	10
•	MMeD Anaesthesia	7
•	Diploma in Clinical Audiology and Public Health Otology	3

Candidates offered admission in the various programmes but deferred for various reasons were eight (8).

GRADUATES FOR 2012

From the various programmes on the college the following table shows the number of graduates for 2012.

Programme	Graduates
MMed Anaesthesia	6
MMed General Surgery	9
MMed Neurosurgery	0
MMed ENT	5
Diploma in audiometry	3
TOTAL	23

PARTNERSHIPS AND LINKAGES

University of Colorado

University of Cape Town

University of Rwanda

ACADEMIC STAFF ACTING AS EXTERNAL EXAMINERS 2012.

Prof. Joseph Oliech External Examiner, Aga Khan University, Nairobi Prof. Z. W.W. Ngumi. External Examiner, National University of Rwanda

Prof. PankajJani. External Examiner, University of Rwanda Dr.P. Mugwe. External examiner for ENTto Muhimbili

Prof S. Ogendo. External examiner for cardiothoracic surgery to University of Addis Ababa

External examiner to College of Surgeons of South Africa

Prof PankajJani External examiner to College of Surgeons of South Africa

External Examiner, National University of Rwanda

Dr.S. Khainga to Eldoret University as external examiner in general surgery

CONFERENCES ATTENDED BY STAFF MEMBERS

Staff members attended various academic conferences or workshops during the year. These include national and international conferences.

s/NO.	NAME	DATES ATTENDED	CONFERENCES/WORKSHOPSATTENDED
1.	DR. CHRISTOPHER	6 th January 2012	World Federation Of Neurosurgeons
<u> </u>	MUSAU	o January 2012	(WFNS) course, Serena Hotel, Nairobi
2.	DR. JULIUS G. KIBOI	6th January	World Federation Of Neurosurgeons
<u> </u>	DK. JOLIOS G. KIBOI	2012	(WFNS) course, Serena Hotel, Nairobi
3.	DR. VINCENT D.	6th January	World Federation Of Neurosurgeons
J	WEKESA	2012	(WFNS) course, Serena Hotel, Nairobi
4.	DR. CHRISTOPHER	6th January	World Federation Of Neurosurgeons
	MUSAU	2012	(WFNS) course, Serena Hotel, Nairobi
5.	DR. DAVID L. OLUNYA	6th January	World Federation Of Neurosurgeons
<u>J.</u>	DIV. DIVID E. OLOIVII	2012	(WFNS) course, Serena Hotel, Nairobi
6.	PROF. MUNGAI NGUGI	8- 10 TH March,	Men's Health Stand-Alone Symposium
0.	THOT: WONG/WINGOGI	2012	in Hamburg, Germany.
		2012	in riamburg, definiany.
		20 nd – 24 th	Surgical Society of Kenya Annual
		March 2012	Scientific Conference held in Kisumu,
		Waren 2012	Kenya
7.	PROF. G. MAGOHA	27 th to 2 nd	Workshop and conference of the Kenya
, ,		March 2012	Association of Urological Surgeons
8.	PROF JOSEPH OLIECH	27th to 2nd	Workshop and conference of the Kenya
		March 2012	Association of Urological Surgeons
9.	DR. PETER NDAGUATHA	27th to 2nd	Workshop and conference of the Kenya
		March 2012	Association of Urological Surgeons
10.	DR. FRANCIS OWILLAH	27th to 2nd	Workshop and conference of the Kenya
		March 2012	Association of Urological Surgeons
11.	PROF PETER MUNGAI	27th to 2nd	Workshop and conference of the Kenya
		March 2012	Association of Urological Surgeons
12.	DR. FRANCIS OWILLAH	20nd – 24th	Surgical Society of Kenya Annual
		March 2012	Scientific Conference held in Kisumu,
			Kenya
13.	DR. DANIEL K. OJUKA	20th - 24th	Surgical Society of Kenya Annual
		March 2012	Scientific Conference held in Kisumu,
			Kenya
14.	DR.ELLY OPOT NYAIM	20th - 24th	Surgical Society of Kenya Annual
		March 2012	Scientific Conference held in Kisumu,
			Kenya
15.	DR. DAN KIPTOON	20th – 24th	Surgical Society of Kenya Annual
		March 2012	Scientific Conference held in Kisumu,
			Kenya
16.	DR. JOSEPH GITHAIGA	20th - 24th	Surgical Society of Kenya Annual
		March 2012	Scientific Conference held in Kisumu,
			Kenya
17.	DR. FRANCIS OSAWA	20th – 24th	Surgical Society of Kenya Annual
		March 2012	Scientific Conference held in Kisumu,
			Kenya
18.	DR. STANLEY KHAINGA	20th – 24th	Surgical Society of Kenya Annual
		March 2012	Scientific Conference held in Kisumu,
		+6	Kenya
19.	DR. WANJALA	20 th – 24th	Surgical Society of Kenya Annual

NANGOLE March 2012 Scientific Confere	
Kenya	nce held in Kisumu,
20. DR. PETER KITUNGUU 20th – 24th Surgical Society of	f Kenva Annual
,	nce held in Kisumu,
Kenya	
21. DR. DAVID KIHIKO 20th – 24th Surgical Society of	f Kanya Annual
,	nce held in Kisumu,
	fice field in Kisuffid,
Kenya	C 14 A 1
22. DR. WANJALA 20th – 24th Surgical Society of	-
	nce held in Kisumu,
Kenya	
23. DR. JAMES MUTURI 20th – 24th Surgical Society of	· ·
NDUNGU March 2012 Scientific Confere	nce held in Kisumu,
Kenya	
24. PROF. ZIPPORAH W 20th – 24th Surgical Society of	f Kenya Annual
NGUMI March 2012 Scientific Confere	nce held in Kisumu,
Kenya	
25. PROF. JOSEPH OLIECH 20th – 24th Surgical Society of	f Kenya Annual
	nce held in Kisumu,
Kenya	,
	leeting of the Kenya
2012 Cardiac Society, T	•
Mombasa	raveners Loage,
	Il Conference 2012 in
27. PROF. JOLIOS KTAWBI 17-23 Watch, 9 PAPSA Berlina 2012 Cape Town, South	
28. PROF. PANKAJ G. JANI 11- 13 TH 3 rd Sudanese Soci	
	and 3 rd International
,	Alliance in Africa and
	erence in Khartoum
Sudan	C
29. PROF. ZIPPORAH 25- 30 TH March, 15 th WFSA World	_
	s in Buenos Aires,
Argentina.	
30. DR. JOSEPH W. 4 17 TH February, Observer in pre an	
	ement and gastro
surgery in New De	
31. DR. PATRICK R. OLANG' 25- 30 TH March, 15 th WFSA World	Congress of
2012 Anaesthesiologist	s in Buenos Aires,
Argentina.	
32. DR. CAROLINE M. 18- 22 ND South Africa Soc	ciety of
	sts Annual Congress
in Cape Town, So	•
33. DR. THOMAS M. 25- 30 TH March, 15 th WFSA World	
	s in Buenos Aires,
Argentina.	o in buchos Alles,
34. DR. FRANCIS OSAWA 9-12 th May, 2012 23 RD Annual meeti	ing of the ESDILin
Zurich, Switzerlan	iu
as as the second	
35. 18- 21 ST March, 9 TH Panafrican Pae	G
2012 Association bienn	ial Conference in Cape

			Town, South Africa
36.	DR. NDUNG'U MUTURI	18- 21 ST March,	9 TH Panafrican Paediatric Surgical
		2012	Association biennial Conference in Cape Town, South Africa
37.	DR FRANCIS OWILLAH	18th -25th May,	American Urological Association's 2012
		2012	Annual meeting in Atlanta, Georgia,
		41. 41.	USA
38.	PROF. MUNGAI NGUGI	18 th -25 th May,	American Urological Association's 2012
		2012	Annual meeting in Atlanta, Georgia, USA
39.	VERNON M. GACII	10 th - 13 th April,	Echocardiography Training organized by
		2012	Sun Echo, Cape Town, S. Africa
40.	PROF. ISAAC M.	2 nd -8 th June,	All Africa ENT and Audiology
4.4	MACHARIA	2012	Conference in Zimbabwe
41.	PROF. PANKAJ G. JANI	23 rd – 27 th April, 2012	Association of Surgeons of Uganda in conjunction with A.S.E.A &COSECSA
		2012	Regional meeting in Fort portal, Uganda
			Section of the sectio
39.		8 th -12 th	Africa Health 2012 Exhibition and
		May,2012	conference in Johannesburg, S.Africa
40.		21 st – 25 th May,	12 th Annual Bethune Roundtable on
40.		2012 2012	Global Surgery Conference in Toronto,
			Ontario, Canada
41.	DR. FRANCIS OWILLAH	18 th -25 th May,	American Urological Association's 2012
		2012	Annual meeting in Atlanta, Georgia,
42.	DR. FRANCIS OSAWA	8 th -13 th May,	USA Furance Society for Pandistria
42.	DR. FRANCIS USAWA	2012	European Society for Paediatric Urologist Conference (ESPU) in Zurich,
		2012	Switzerland
43.	DR. NDUNG'U MUTURI	19 th – 23 rd	PARSA 2012 Congress in South Africa
		March, 2012	
44.	DR. DANIEL K. OJUKA	19 th – 25 th June,	The Fellowship at Yonsei University,
45.	DR PETER MUGWE	2012 16 th - 20 th June,	Seoul, Korea European Academy of Allergy and
13.	DICTE PER WIGGWE	2012	Clinical Immunology in Geneva,
			Switzerland
46.	SERAH N. NDEGWA	2 nd -8 th June,	All Africa ENT and Audiology
47	LOVCE NA ACVAZANI	2012 2 nd June- 7 th	Conference in Zimbabwe
47.	JOYCE M. ASWANI	June, 2012	AAENTA Congress and Exhibition in Victoria Falls, Zimbabwe
		Julie, 2012	victoria i alis, ziiribabwe
48.	PROF. MUNGAI NGUGI	30 TH SEPTEMBER	32 nd SU Congress, Fukuoka- Japan
		- 4 TH OTOBER,	
	PD05 1025011 5115011	2012	
49.	PROF JOSEPH OLIECH	30TH	32nd SU Congress, Fukuoka- Japan
		SEPTEMBER - 4TH OTOBER,	
		2012	
50.	PROF. ZIPPORAH	25th – 26th May	World Christian Doctors Network, Safari
	NGUMI	2012	Park.

51.	PROF NIMROD	25 th – 27 th May	International Paediatric Neurosurgical
	MWANGOMBE	2012	Society Conference, Panafric Hotel,
			Nairobi
52.	DR. CHRISTOPHER	25th – 27th May	International paediatric neurosurgical
	MUSAU	2012	Society Conference, Panafric Hotel,
		07:1	Nairobi
53.	DR. JULIUS G. KIBOI	25th – 27th May	International paediatric neurosurgical
		2012	Society Conference, Panafric Hotel, Nairobi
54.	DR. VINCENT D.	25th – 27th May	International paediatric neurosurgical
J4.	WEKESA	2012	Society Conference, Panafric Hotel,
	WEILES/ L	2012	Nairobi
55.	PROF GEORGE	4 th July 2012	Kenya Association of Urologic Surgeons
	MAGOHA	,	and Urological Society of India on day
			meeting
56.	PROF. JOSEPH OLIECH	4th July 2012	Kenya Association of Urologic Surgeons
			and Urological Society of India on day
			meeting
57.	DR FRANCIS OWILLAH	4th July 2012	Kenya Association of Urologic Surgeons
			and Urological Society of India on day meeting
58.	DR PETER NDAGUATHA	4th July 2012	Kenya Association of Urologic Surgeons
36.	DITTETER NDAGOATTIA	Tell July 2012	and Urological Society of India on day
			meeting
59.	PROF PETER MUNGAI	4th July 2012	Kenya Association of Urologic Surgeons
			and Urological Society of India on day
			meeting
60.	PROF. PANKAJ G. JANI	17 TH - 19 TH	Laparoscopic Workshop, Kampala
		JULY,2012	
61		20 TH -24 TH	COCCCA Parianal Mantina
61.		AUGUST, 2012	COSECSA Regional Meeting
		A00031, 2012	
	DR. FRANCIS OSAWA	9 TH – 13 TH JULY,	AMREF outreach to Bwera Hospital,
		2012	Uganda
62.	DR. CAROLINE MWANGI	6 TH - 14 TH JULY,	Teach the Teacher Course for Doctors,
		2012	London
63.	DR. VINCENT D.	19 TH -21	Copenhagen Skull Base Course 2012,
	WEKESA	SEPTEMBER,	Denmark
64	DD CADOLINE MANAGE	2012 Sontombor 2012	National Clinical Officer Assesthatists
64.	DR. CAROLINE MWANGI	September 2012	National Clinical Officer Anaesthetists Conference, Mombasa, Kenya
65.	PROF. S.W.O OGENDO	8 TH - 12 TH	Organizational Development Workshop,
05.	I NOI . J. W.O OGLINDO	OCTOBER, 2012	Dublin, Ireland
		33.352.1, 2012	
66.		15 TH - 17 TH	College of Surgeons Examinations
		OCTOBER, 2012	October 2012, Pretoria, S. Africa
67.	PROF. Z. W.W. NGUMI	22 ND	Operation Smile Mission, Philippines
		NOVEMBER- 2 ND	
		DECEMBER,	

		2012	
68.	DR. JOSEPH GITHAIGA	10 th to 11 th	mesh hernia surgery workshop at
		October 2012	Nairobi Surgical skills Centre
69.	DR. THOMAS M.	4 TH - 13 TH	Operation Smile Mission, Kisumu, Kenya
	CHOKWE	OCTOBER, 2012	
70.	PROF. PANKAJ G. JANI	8 TH - 12 TH	Organizational Development Workshop,
		OCTOBER, 2012	Dublin, Ireland
		T., T.,	
71.		15 TH - 17 TH	College of Surgeons Examinations
		OCTOBER, 2012	October 2012, Pretoria, S. Africa
72.		25 TH - 27 TH	Athens Advanced Seminar of IASGO,
		OCTOBER, 201	Athens, Greece
72		20 TH OCTOBER	Nandinal/Summinal Community of Community
73.		28 [™] OCTOBER- 4 [™] NOVEMBER,	Medical/ Surgical Camp, Lesotho, S. Africa
		2012	Africa
		2012	
74.		5 TH - 7 TH	17 th Annual General Meeting and
,		DECEMBER,	Scientific Conference of the SSE and
		2012	COSECSA's 13 th Annual General Meeting
			and graduation ceremony, Addis Ababa,
			Ethiopia
75.	PROF. PETER	12 TH -17 TH	5 th Conference of Parties (COP 5) to the
	ODHIAMBO	NOVEMBER,	WHO Framework Convention On
		2012	Tobacco Control, Seoul, S. Korea
76.	DR. CAROLINE MWANGI	15 TH - 25 TH	Operation Smile Mission, Lilongwe,
		NOVEMBER,	Malawi
		2012	
77.	DR. VINCENT D.	13 TH - 15 TH	Advanced Skull Base Microanatomy
	WEKESA	NOVEMBER,	Course, Florida, US
70	DDOE CAN O OCENDO	2012	
78.	PROF. S.W.O OGENDO	29TH OCTOBER- 2 ND NOVEMBER,	Curriculum and Course design in
		2012	Medical Education at Maastritcht University, Netherlands
		2012	Offiversity, Netherlands
79.		26th – 30th	Trainer, bioethics and research ethics
, 5.		November 2012	workshop, College of Health Science
			1 1,711 1202 11 11 11 11 11 11 11 11 11 11 11 11 11
80.		5 TH - 7 TH	17 th Annual General Meeting and
		DECEMBER,	Scientific Conference of the SSE and
		2012	COSECSA's 13 th Annual General Meeting
			and graduation ceremony, Addis Ababa,
			Ethiopia
81.	DR. PATRICK OLANG	4 TH - 13 TH	Operation Smile Mission, Kisumu, Kenya
		OCTOBER, 2012	
82.	DR. F. NANGOLE	4 TH - 13 TH	Operation Smile Mission, Kisumu, Kenya
	WANJALA	OCTOBER, 2012	
83.	PROF. PETER M. NGUGI	7 TH -12 TH	Urology CME, Bangkok, Thailand
		DECEMBER,	
	DDOF AUG 12 C2	2012	
84.	PROF NIMROD	2 nd - 4 th	Panafrica Neurological Society.

	MWANGOMBE	December 2012	Methodist guest house, Nairobi
85.	DR. CHRISTOPHER	2nd - 4th	Panafrica Neurological Society.
	MUSAU	December 2012	Methodist guest house, Nairobi
86.	DR. JULIUS G. KIBOI	2nd - 4th	Panafrica Neurological Society.
		December 2012	Methodist guest house, Nairobi
87.	DR. VINCENT D.	2nd - 4th	Panafrica Neurological Society.
	WEKESA	December 2012	Methodist guest house, Nairobi
88.	DR. DAVID L. OLUNYA	2nd - 4th	Panafrica Neurological Society.
		December 2012	Methodist guest house, Nairobi

PAPERS PRESENTED AT CONFERENCES/WORKSHOPS

Prof. J. Oliech.

1. Colonic cancer presenting as lower urinary tract obstruction.

Prof S.W.O. Ogendo,

- 1. "Cardiac surgery in Kenya" at official opening of National Cardiac Centre in Dar es Salaam, Tanzania
- 2. "Plagiarism" at bioethics and research ethics workshop, College of Health Science

Prof Z. Ngumi.

- 1. Paediatric fellowship training in Kenya at 15th WFSA World Congress of Anaesthesiologists in Buenos Aires, Argentina.
- 2. World Christian doctors network. $25^{th} 26^{th}$ May 2012 presented two papers; case presentation on faith healing safari park.

Prof P. Mungai

- 1. <u>Urolithiasis in Kenya</u>. Paper read at Kenya Association of Urologists meeting in Nairobi,
- 2. Lower urinary tract symptoms.
- 3. Kenya Association of Urological surgeons meeting,27th to 2nd March 2012 "Forniers gangrene"
- 4. Surgical Society of Kenya meeting. "Cancer of prostate" SSK meeting
- 5. Men's Health Stand-Alone Symposium in Hamburg, Germany. "Erectile dysfunction in aging man"
- 6. Oncology conference at Serena hotel. "Prostate cancer"

Dr. Joseph Githaiga

1. Recent advances in breast cancer surgery at the SSK meeting in Kisumu

Dr. Mark Awori

 Mitral valve repair at Annual General Meeting of the Kenya Cardiac Society, Travellers Lodge, Mombasa

Dr. Caroline Mwangi

1. Airway management in patients undergoing surgery" at the National Clinical Officer Anaesthetists Conference, Mombasa, Kenya

Dr. Julius Kiboi

1. Advances in aneurysm surgery, coils vs clipping. Panafrican Association of Neurological Society (PAANS). Methodist guest house, Nairobi

Dr. Christopher Musau.

1. Pattern of aneurysms in Kenya. Panafrican Association of Neurological Society (PAANS). Methodist guest house, Nairobi

Dr. David Olunya.

Dr.PerterNdaguatha

1. Ndaguatha PLW, Post urethral stricture repair, Transitional cell carcinoma of the Urethra. Paper read at Kenya Association of Urologists meeting in Nairobi,

Dr. David Kihiko

1. Paediatric urology in Kenya at the SSK meeting in Kisumu

Dr. Francis Osawa

1. Snake bites as seen in KituiDistric Hospital at the SSK meeting in Kisumu

FUNDED RESEARCH PROJECTS

The department run two funded research projects last year.

The local principle investigator for the first was Prof. Isaac Macharia in collaboration with University of Colorado, Denver. Study was entitled "Complications of otitis media in school children". This study was conducted in 9 districts of Nakuru, Nayndarua, Kitu central, Embu east, Strarehe in Nairobi, Nyando, Eldoret east, and Kisii.

Data collection was completes in November

Budget for the study was about 15millionKsh.

The next local principle investigator is Prof Z. Ngumi. The Partnership for Advanced Care and Treatment (PACT-COE.)Project on collaboration with the University of Maryland KNH and PumwaniMaternity Hospital. The project aims to facilitate achievement of a comprehensive HIV prevention, care and treatment program in order to facilitate the Ministries of Medical Services and Public Health and Sanitation control the spread of HIV, and rapidly scale up HIV services within government run health facilities in Nairobi

This is a 5 year project now in and 3rd year. Budget allocation for 2012 was 4.3million.

OTHER RESEARCH ACTIVITY

Another study underway is the rheumatic heart (REMEDY) Study. This study is a prospective, international (Africa and India), hospital-based registry; follow-up and outcome ascertainment at two-year follow-up. Kenya is one of the African countries participating and the local principle investigator is Prof. S. Ogendo.

The study first phase examines the epidemiological pattern of disease in participating countries. Phase two, due to commence in 2013 will looks into the genetic aspects of susceptibility to rheumatic heart disease following an attack of sore throat.

PUBLICATIONS

For the year 2012 the following publications were produced by the department.

1. EW Hungu, SWO Ogendo. Thromboembolic and bleeding complications in patients with prosthetic heart valves at the Kenyatta National Hospital. Annals of African Surgery - Vol 9 (2012)

Background: Despite constant monitoring of anticoagulation in prosthetic valve patients, haematologic complications occur. This study documented the occurrence of such complications and associated risk factors at the Kenyatta National Hospital (KNH). Study design: Observational study reviewing 142 patients, 39 prospective and 103 retrospective.

Outcome measures: International Normalised Ratio (INR); presence of signs and symptoms of haematological complications.

Results: Forty four (31%) patients presented with bleeding tendencies, 28 grade I and 4 grade III. The most common thromboembolic complication was headache in 33 (23.2%) patients. Mean duration of anticoagulation for patients with complications was 82.9 months (± 64), compared to 60.8 months (± 43.8) in those without. Nine patients were non-compliant in taking medications, haematologic complications presenting in 8 of them. Conclusion: A positive association was established between hematologic complications and INR levels, duration of anticoagulation therapy, non-compliance in taking of medications, and increased period between clinic visits. Of these only the duration of anticoagulation was an independent predictor for haematological complications.

2. Kiboi JG, **Kitunguu PK**, Musau CK, Mwang'ombe NJ. Clinical experience and outcome of pituitary surgery in Kenyan patients at the Kenyatta National Hospital. African Journal of Neurological Sciences. December 2012

ABSTRACT

Introduction. Surgical extirpation of pituitary lesions and can be performed by craniotomy or trans-sphenoidalhypophysectomy. This could be for pituitary ablation, excision of pituitary adenomas, craniopharyngiomas, suprasellarmeningiomas and other types of tumors of the sellar region. Despite this being a common neurosurgical procedure there is a paucity of data on the local Kenyan experience and outcomes following pituitary surgery. Study Design and Site. A retrospective study at the Kenyatta National Teaching and Referral Hospital. Objectives. To evaluate the clinical presentation, management and outcome of patients undergoing surgery for pituitary lesions at the Kenyatta National Hospital. Patients and Methods. Following ethical approval, patients' records were retrieved and assessed for clinical and radiologic features of pituitary lesions, surgical treatment and post operative outcome. All the data was coded and analysed using Statistical Package for Social Sciences (SPSS) version 16.0. Results. Sixty five patients, 39 (60%) female and 26 (40%) male patients were included. The mean age was 36.88 years (+14.689). The most common presentation were visual disturbances reported by 57 (87.7%)

of the patients having reduction in visual acuity, while 37 (56.9%) had bitemporal hemianopia. Sixty two (95.4%) patients were operated during the study period and of these 28 (45.2%) by the transphenoidal approach as opposed to 34 (54.85%) by craniotomy. The pterional trans-sylvian approach was the most prevalent of transcranialhypohysectomies accounting for 17 (50%) patients, while 15 patients (44.1%) were operated by the subfrontal approach and two patients were operated via midline trans-callosal approach. Majority (96.4%) of trans-sphenoidalhypophysectomies were by sub-labial incision. Fifty (76.9%) of the patients had good functional outcome while 11 (16.9%) and 4 (6.2%) suffered moderate and severe disability respectively. Patients' age (p=0.0029), duration of symptoms prior to surgery (p=0.0018) and surgical management versus conservative (p=0.001) significantly affected patient outcome. There was no statistically significant difference in outcome between patients of different sex (p=0.058) or the type of operation performed (p=0.191). **Conclusion.**Transsphenoidal and transcranial approaches are effective and safe treatment strategies for pituitary lesions with low morbidity, mortality and recurrence rates.

3. Mwang'ombe NJ. The role of young neurosurgeons in the development of neurosurgery.

Asian J Neurosurg. 2012 Jan;7(1):1. doi: 10.4103/1793-5482.95686.

The early development of neurosurgery was through the pioneering efforts of a few dedicated young neurosurgeons. In this editorial, I would like to outline the careers of three neurosurgeons, whose achievements during the early years of their careers had a major influence in the development of the speciality of neurosurgery. Sir Victor Horsley was appointed the first neurosurgeon at the National Hospital for Neurology and Neurosurgery, Queen Square, London, in 1886, at the young age of 29 years. He qualified as a medical doctor at the University College Hospital (UCH), London, in 1881. He was able to establish his mark in the development of neurosurgery, by introducing bone wax and, through a collaboration with Robert Henry Clarke, the stereotactic frame. He was appointed Professor of Surgery at UCH in 1902. He conducted laboratory research and published articles on the thyroid and pituitary glands, and innervations of the larynx. His landmark contribution, at a relatively young age, was that of the stereotactic frame. The National Hospital for Neurology and Neurosurgery, Queen Square, London, has maintained that tradition of clinical work and research in the neurosurgical training of young neurosurgeons that I myself, have benefited from during my period there as a research registrar, during the period 1984 – 1988. Dr. Harvey Cushing made his groundbreakingachievements in neurosurgery, while in his thirties, at the Johns Hopkins as an an 'associate' in surgery to Dr. William Halsted. He established the Hunterian Laboratory, where he was able to conduct research on the pituitary gland and publish his first monograph on pituitary diseases in 1912. He established the Society of Clinical Surgery, in 1903, a forum for young surgeons in the world to meet and watch each other operate – a tradition that still remains and is very akin to the World Federation of Neurosurgical Societies' Young Neurosurgeons Forum. At the time he left Hopkins for Peter Bent Brigham Hospital, Harvard, in 1913, he was already an international neurosurgeon and the acknowledged founder of organized neurosurgery as a specialty. Dr. Walter Dandy, who succeeded Harvey Cushing at Johns Hopkins, was another young achiever. He utilized the Hunterian Laboratory established by Cushing, to conduct experiments on the circulation of

cerebrospinal fluid (CSF), and together with Kenneth Blackfurn, a pediatric registrar, contributed to our understanding of the circulation of CSF and hydrocephalus. He later made other significant contributions such as the introduction of encephalography and ventriculography. The young neurosurgeons of today will continue to play a major role in the development of neurosurgery, by building on the foundations laid down by the early pioneers, benefiting from the mentorship and skill-acquisition from the masters, laboratory research, and the translation of research findings into clinical practice. It is in the latter, as shown from the history of the pioneers, where the modern young neurosurgeons are more likely to leave a mark in the development of neurosurgery.

4. Ojuka KD, Nangole F, Ngugi M. Management of anterior abdominal wall defect using a pedicled tensor fascia lata: A case report. Case Rep Med. Volume 2012, doi: 10.1155/2012/487126. Hindawi Publishing Corporation

Abstract

Degloving injuries to anterior abdominal wall are rare due to the mechanism of injury. Pedicled tensor fascia lata is known to be a versatile flap with ability to reach the lower anterior abdomen. A 34-year-old man who was involved in a road traffic accident presented with degloving injury and defect at the left inguinal region, sigmoid colon injury, and scrotal bruises. At investigation, he was found to have pelvic fracture. The management consisted of colostomy and tensor fascia lata to cover the defect at reversal. Though he developed burst abdomen on fifth postoperative day, the flap healed with no complications.

5. Ombati AN, Ndaguatha PL, Wanjeri JK. Risk factors for kerosene stove explosion burns seen at Kenyatta National Hospital in Kenya. Burns. 2013 May;39(3):501-6. doi: 10.1016/j.burns.2012.07.008. Epub 2012 Sep 19. Abstract. BACKGROUND: The kerosene stove is a common cooking appliance in lower and middle income households in Kenya and if it explodes, life threatening thermal burn injuries may be sustained by those using the appliance. Women tend to be victims more frequently since traditionally they are the ones who are involved in cooking. OBJECTIVES: The aim of this study was to determine risk factors predisposing to kerosene stove explosion burns seen at Kenyatta National Hospital. MATERIALS AND METHODS: The study was a prospective longitudinal descriptive study carried out at the Kenyatta National Hospital. Forty-eight patients who met the inclusion criteria were recruited into the study over a period of 6 months from November 2010 to April 2011 and the data was collected using a structured questionnaire. The analysis, using SPSS version 17.0 was done by associating occurrence of injury to: age, sex, socioeconomic status and level of education of patient. Charts and tables were used to present the results. RESULTS: The mean age of patients who sustained kerosene stove explosion burns was 23.6 years (SD±11.7) with the commonest age group being 20-39 years. More females were affected than males by a ratio of 7:3 and ninety two percent of those who sustained these burns were either from poor or lower middle socio-economic class. Stove explosions occurred mainly during cooking and when kerosene refill was being done. Most of the patients (63%) reported having bought kerosene from fuel vendors and almost all explosions were caused by the wick type of stove (98%). CONCLUSION: Young females from poor socioeconomic background were found to be at a higher risk for kerosene stove explosion burns. The wick stove is a common cause of burns especially when users unwittingly refill it with kerosene when already lit resulting in an explosion. Prevention can

be done through evidence based public health education targeting the groups at risk and enactment of relevant laws.

6. Kihiko DK. Degloving Penile trauma in a 12 year old boy: A case report. *Annals of African Surgery* 2012;9:58-60

Abstract

Degloving injury of the penis is rare in children. Management has been controversial and not much literature exists. We present a 12 year old boy who sustained a degloving penile trauma after assault. We managed him by primary suture and local fl aps with good cosmetic and functional results.

7. Jani, P.G; Gill, H. &Kotecha, V.Difficult gallbladder surgery, improving patient outcomes through appropriate surgical decisions. East and Central African Journal of Surgery, Vol. 17, No. 1, 2012, pp. 77-84

ABSTRACT

Background: Cholecystectomy is becoming a common operation in Africa. The right upper quadrant is regarded by many as the most difficult area of the abdomen because of the variable anatomy, small sized ducts and the irritant nature of bile. The fact that patients present late also adds to the difficulty with identification of structures in this area. A good working knowledge of the incidence and types of anatomical variations is key to a safe cholecystectomy. About 50% of patients presenting with gallbladder pathology show a significant anatomical variations. This study aimed to improve awareness amongst surgeons, both consultants and those in training to improve patient outcomes with gall bladder pathology.

Case presentations: Four patients who had re-do surgeries at three different private hospitals in Nairobi are presented and discussed. None of the primary surgery in the four cases was done any of the authors. The re-do surgery in the four cases was performed by the principal author. The four patients respectively had a bile duct injury post open cholecystectomy, cholecystostomy done for gall bladder empyema, a stricture from a previous biliary-enteric anastomosis and obstructive jaundice from chronic pancreatitis.

Conclusion: The large number of variations in the anatomic structure of biliary tree imposes an imperative need for surgeons to have an adequate knowledge and understanding of those variations, in order to control the safety of the surgical procedure in this field. A large number of postoperative complications seen in this surgical area result from iatrogenic injuries incurred by a variation of anatomic elements. The role of the medical boards should change to confer consultant status only after a surgeon is capable of independent decision-making and after a reasonable number of cases with recorded good outcomes.

8. Okello G, Ndegwa SN, Halliday KE, Hanson K, Brooker SJ, Jones C. Local perceptions of intermittent screening and treatment for malaria in school children on the south coast of Kenya. Malar J. 2012 Jun 8;11:185. doi: 10.1186/1475-2875-11-185.

Abstract. BACKGROUND: The intermittent screening and treatment (IST) of school children for malaria is one possible intervention strategy that could help reduce the burden of malaria among school children. Future implementation of IST will not only depend on its efficacy and cost-effectiveness but also on its acceptability to parents of the children who

receive IST, as well as those responsible for its delivery. This study was conducted alongside a cluster-randomized trial to investigate local perceptions of school-based IST among parents and other stakeholders on the Kenyan south coast. METHODS: Six out of the 51 schools receiving the IST intervention were purposively sampled, based on the prevalence of Plasmodium infection, to participate in the qualitative study. Twenty-two focus group discussions and 17 in-depth interviews were conducted with parents and other key stakeholders involved in the implementation of school health programmes in the district. Data analysis was guided by the framework analysis method. RESULTS: High knowledge of the burden of clinical malaria on school children, the perceived benefits of preventing clinical disease through IST and previous positive experiences and interactions with other school health programmes facilitated the acceptability of IST. However, lack of understanding of the consequences of asymptomatic parasitaemia for apparently healthy school children could potentially contribute to non-adherence to treatment, and use of alternative anti-malarial drugs with simpler regimens was generally preferred. The general consensus of stakeholders was that health workers were best placed to undertake the screening and provide treatment, and although teachers' involvement in the programme is critical, most participants were opposed to teachers taking finger-prick blood samples from children. There was also a strong demand for the distribution of mosquito nets to augment IST. CONCLUSION: School-based malaria control through IST was acceptable to most parents and other stakeholders, but careful consideration of the various roles of teachers, community health workers, and health workers, and the use of anti-malarial drugs with simpler regimens are critical to its future implementation.

9. Aswani J. Baidoo K. Otiti J. Establishing a head and neck unit in a developing country. J. Laryngol Otol. 2012 June; 126(6):552-5. Abstract

Head and neck cancers pose an especially serious problem in developing countries due to late presentation requiring complex surgical intervention. These countries are faced with many challenges, ranging from insufficient health care staff to problems with peri-operative requirements, diagnostic facilities, chemoradiation services and research funding. These challenges can be addressed through the training of head and neck surgeons and support personnel, the improvement of cancer awareness in local communities, and the establishment of dedicated head and neck institutes which focus on the special needs of head and neck cancer patients. All these changes can best be achieved through collaborative efforts with external partners. The Karl Storz Fellowship in Advanced Head and Neck Cancer, enabling training at the University of Cape Town, South Africa, has served as a springboard towards establishinghead and neck services in developing sub-Saharan African countries.

10. Challenges of inappropriate timing of hypospadias repair. Annals of African surgery journal 2012No abstract

CONSULTANCIES

Full list of consultancies to follow.

Departmental academic staff continue to offer consultancy services to the KNH.

FACILITIES AND INFRASTRUCTURE

New facilities acquired in the 2012 year include a new LCD with motorised screen for the departmental board room. These were kindly supplied through funding from the office of the dean.

Work continued on the video link between the main theatre complex and lecture theatre 2. Last phase remains and anticipated to be operational by early 2013.

COMMUNITY OUTREACH

Staff within the department offer community service through a number of avenues.

Members of academic staff took a prominent part in the annual Surgical Society of Kenya surgical camp. This took place in North Rift region between 27th and 30th September 2012. Dr.Owillah as the chairman of the Society led the surgical teams.

Staff members also play a leading role in professional bodies and these include the following;

- Prof GeorgeMagoha Chairman of the Kenya Medical Practitioners and Dentists Board
- Prof. ZiporahNgumi is a member of the Kenya Medical Practitioners and Dentists Board
- Dr.EllyOpotNyaim is member of the Kenya Medical Practitioners and Dentists Board
- Prof GeorgeMagoha Chairman of the Kenya Association of Urological Surgeons
- Dr.EllyOpotNyaim a lecturer in the Department of Surgery is the current Chairman of the Kenya Medical Association (KMA).
- Dr.EllyOpotNyaim and Dr. D. Ojuka re council members of the Surgical Society of Kenya.
- Dr. F. Owilla, chairman of the Surgical Society of Kenya.
- Dr. Mark Awori is vice chairman of the Kenya Cardiac Society

Other individual staff members continue to involve themselves in community activities.