ABSTRACTS

45TH SCIENTIFIC MEETING OF GHANA SURGICAL RESEARCH SOCIETY IN COLLABORATION WITH THE WEST AFRICAN COLLEGE OF SURGEONS (GHANA CHAPTER)

THEME: "INFECTIONS IN SURGERY"

SURGICAL SITE INFECTION IN GENERAL SURGERY

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Abstract

Introduction *:* Surgical site infections (SSI) are a significant cause of post-surgical morbidity and mortality and can be an indicator of surgical quality. The objectives of this study were to measure after general surgical operation SSI at Tamale Teaching Hospital (TTH) and to describe the associated risk factors in order to reduce it.

Methods : This study included data from emergency and elective surgical procedures performed at the General surgery unit of TTH from January 2010 to December 2014. Post-operative SSI data were prospectively collected. Logistic regression was used to identify SSI risk factors.

Results : A total of 1014 patients underwent general surgical procedures. The incidence of SSI was 94 (9.3%); Superficial SSI occurred in 60 (5.9%) while deep SSI was present in 34 (3.4%). The median length of hospital stay for patients without SSI was 10 days (range 2 to 10 days) compared to 35 days (range 20 to 35 days) in those with SSI ($p < 0.001$). Eighty-five percent of SSI occurred after emergency abdominal surgeries. Multivariate analysis identified late presentation, blood transfusion and type of surgery as associated with an increased risk of SSI

Conclusions : Surgical site infection causes significant morbidity and long hospital stay. Multicenter study will assist healthcare facilities with monitoring and evaluation as well as quality control assurance of surgical programs in Ghana.

SURGICAL OUTREACH SERVICES IN GHANA – IS THERE A NEED FOR A NATIONAL POLICY ?

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Abstract

Introduction *:* Surgical disease accounts for 11% of the total burden of disease worldwide, and yet access to surgical services in Low & Middle Income Countries (LMICs) is mostly concentrated in the more urbanized parts of these countries. This is largely due to the lack of adequate manpower and appropriate facilities. One of the more common solutions is for teams of experts from urban health facilities to travel to remote communities for different lengths of time to provide surgical treatments. The purpose of this presentation is to provoke a discussion on safe, effective and efficient approaches to providing surgical outreach services in Ghana.

Methods : A review of the different approaches to providing surgical outreach services in Ghana will be outlined and comparisons made. Similar practices in other LMICs will be reviewed and compared with the situation in Ghana. The main findings will be outlined and inferences made.

Results/Discussion : The merits and demerits of the approaches will be discussed and recommendations for a national policy made.

Conclusion : In order to assure efficacious, high quality and safe surgery for remote rural communities in Ghana, a national policy on outreach services is required.

QUALITY OF REFERRALS FOR ELECTIVE SURGERY AT A TERTIARY CARE HOSPITAL IN A DEVELOPING COUNTRY : AN OPPORTUNITY FOR IMPROVING TIMELY ACCESS TO AND COST-EFFECTIVENESS OF SURGICAL CARE

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Abstract

Introduction : Due to deficiencies in surgical capacity, a disproportionate number of persons needing surgery are referred to tertiary facilities in developing countries.
Objectives : To assess the quality of referrals for surgery to a tertiary hospital in Ghana and identify interventions for improving the referral process.
Methodology : Two months of consecutive referrals for elective surgery to Komfo Anokye Teaching Hospital were assessed. Seven essential items in a referral were recorded as present or absent. The proportion of missing information was evaluated between facility and referring clinician type. Also, the proportion of missing information was quantified from referrals that did not use a structured form and those that did.
Results : A total of 643 referrals for surgery were assessed. Of these, none recorded all of the essential information. The median number of missing items was 4 (range 1 – 7). Clinicians that did not use a form missed 5 or more essential items 50% of the time, compared with 8% when a structured form was used (p=0.001). However, even with the use of a structured form, 1 or 2 items were not recorded for 10% of referrals and up to 3 items for 45% of referrals. There was no evidence for a difference between facility or clinician type and number of missing items (p>0.05).
Conclusion : Referrals using structured forms contain less missing essential information and may be further improved by referrer feedback or electronic referral systems. Though often overlooked, referral process improvements may reduce waiting times and duplication of scare resources.

PENILE CANCERS IN KUMASI – A FIVE YEAR REVIEW

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Abstract

Introduction : Penile cancers are rare. The aim of this study was to describe the clinicopathological presentation and the mode of treatment of penile cancers in our setting.
Methods : This was a retrospective study of histologically confirmed cases of penile cancers seen at KATH from January 2009 to December 2014. Information gathered included age, the clinicopathological features and mode of treatment using a structured proforma.
Results : There were 13 cases of histologically confirmed penile cancers over the period. The age range was from 32-91 years with a median age of 62 years.
In 4 patients, the lesion was restricted to the glans penis ; it involved the distal penis in 3, midshaft in 2, proximal penis in 1 and base of the penis in 2. One of last two patients had auto amputation of the penis. All were squamous cell carcinomas with majority being moderately well differentiated (80%). Seven had ulcerative lesions and 6 were cauliflower-like. Majority were advanced (T4) involving the corpora (69%). Eleven patients (84.6%) had lymph node involvement and two had distant metastasis at presentation.
Only one patient had a penile sparing surgery with 10 of them having partial penectomy. One had total penectomy with suprapubic urinary diversion whiles the one with auto amputation had radiotherapy as the primary treatment. Eleven of the patients had lymph node dissection. Four had adjuvant radiotherapy.
Conclusion : Most patients present with advanced disease making effective treatment difficult. Further education is needed to ensure early detection and treatment

NATIONAL PERIPHERAL ARTERY DISEASE RISK AND ASSESSMENT OF VASCULAR CARE CAPACITY IN GHANA : A LOOK TO THE FUTURE

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Abstract

Introduction : The burden of peripheral vascular disease (PVD) in low- and middle-income countries (LMICs) is increasing and will fall on health systems least equipped to provide necessary care.

Objectives : To estimate the number of Ghanaians at risk of PVD, quantify national vascular care capacity and identify factors contributing to item non-availability.

Methodology : Prevalence of PVD risk factors from WHO's Study on Global Ageing Health (SAGE) Ghana were described. Risk factors included : hypertension, diabetes, obesity, and cardiovascular disease diagnosis or treatment, smoking, and advanced age. In addition, a nation-wide assessment of vascular care capacity was performed. Direct inspection and structured interviews with hospital staff were used to assess item availability at 40 district, regional and tertiary hospitals in Ghana. Factors contributing to item non-availability were also assessed.

Results : There were 4,305 respondents aged ≥50 years with data to estimate PVD risk representing 2, 879,318 Ghanaians. Of these, 57% were at moderate to high risk of PVD (≥3 risk factors ; 1, 654,557 persons). Vascular care capacity assessment demonstrated deficiencies in diagnostics (i.e. duplex ultrasonography, angiography), and perioperative (i.e. airway equipment, electronic cardiac monitoring) and surgical care (i.e. anastomosis, graft material). Deficiencies were most often due to equipment absence, lack of training and technology breakage.

Conclusion : PVD risk factors are highly prevalent in Ghana, which also has critical vascular care capacity deficiencies. Given these deficiencies were often the result of a lack of training and technology breakage, attention to training relevant manpower in LMICs will be increasingly important as the burden of PVD increases

PROSTATE CANCERS IN KUMASI – A TWO YEAR REVIEW

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Abstract

Introduction *:* Prostate cancer is the leading genitourinary malignancy in Ghana. The objectives of the study are to describe the clinico-pathologic characteristics and the treatment modalities employed for prostate cancer patients in Kumasi.

Methods*:* We prospectively obtained data on patients diagnosed of prostate cancer over a period of two years (Jan 2013 – Dec 2014) using structured questionnaire. Data obtained include the clinical stage on presentation, histo-pathological characteristics and the treatment modality employed. Data was edited and transferred onto SPSS 16.0 for descriptive analysis.

Results: Over the period, 120 cases were seen. The age range was from 43 to 83years with a mean of 68years. Common presentations were waist pains in 90 (75%); retention of urine in 58 (48.3%), hematuria in 42 (35%), anemia in 23 (19.2%), erectile dysfunction in 23 (19.2%) and paraplegia 20 (16.7%). Majority (46%) had PSA levels ranging from 20-50ng/ml and 30% of them had PSA levels above 100ng/ml.

All the patients had adenocarcinoma of the prostate. Twenty (16.7%) of the patients had organ confined prostate cancer and thirty (25%) had locally advanced disease with 58.3% having metastatic disease.

Sixty two patients had surgical castration, 29 had medical castration, 10 had active surveillance and 11 had radiotherapy whiles 8 had radical prostatectomy.

Conclusion: Most of our patients present late with unfavorable tumor characteristics. Public health education and screening programs will ensure early detection of prostate cancer and curative treatment for patients who require it.

SURGERY FOR CONDITIONS OF INFECTIOUS ETIOLOGY IN RESOURCE-LIMITED COUNTRIES AFFECTED BY CRISIS : THE MÉDECINS SANS FRONTIÈRES OPERATIONS CENTRE BRUSSELS EXPERIENCE

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Abstract

Introduction *:* Surgery for infection represents a substantial, though undefined, disease burden in low- and middle-income countries (LMICs). Médecins Sans Frontières – Operations Centre Brussels (MSF-OCB) provides surgical care in LMICs and collects data useful for describing operative epidemiology of surgical need otherwise unmet by national health services. This study aimed to describe the experience of MSF-OCB surgery for infections in LMICs. By doing so, the results might aid effective resource allocation and preparation of future humanitarian staff.

Methods : Procedures performed in operating theatres at facilities run by MSF-OCB from July 2008 through June 2014 were reviewed. Projects providing only specialty care were excluded. Procedures for infection were described and related to demographics and reason for humanitarian response.

Results : A total of 96,239 operations were performed at 27 MSF-OCB sites in 15 countries between 2008 and 2014. Of the 61,177 general operations, 7,762 (13%) were for infections. Operations for skin and soft tissue infections were the most common (64%), followed by intra-abdominal (26%), orthopaedic (6%) and tropical infections (3%). The proportion of operations for skin and soft tissue infections was highest during natural disaster missions ($p<0.001$), intra-abdominal infections during hospital support missions ($p<0.001$) and orthopaedic infections during conflict missions ($p<0.001$).

Conclusion : Surgical infections are common causes for operation in LMICs, particularly during crisis. This study identified that infections require greater than expected surgical inputs given frequent need for serial operations to overcome contextual challenges and those associated with limited resources in other areas (e.g. ward care). Further, these results demonstrate that the pattern of operations for infections is related to nature of the crisis. Incorporating training into humanitarian preparation (e.g. surgical sepsis care, ultrasound-guided drainage procedures) and ensuring adequate resources for the care of surgical infections are necessary components for providing essential surgical care during crisis.