therefore underscored the need for early screening of HIV positive patients for chronic kidney disease, especially in a resource poor setting like ours, where renal replacement therapy is not readily available and the cost of treatment is often beyond the reach of most of the patients. More so, most of the patients with HIV infection are often young and belong to the economically active age group as shown in this study.

Chronic glomerulonephritis (CGN) from the other causes still remained a major cause of kidney failure. It accounted for 20% of the cause of ESKD in the study. It is the major cause of kidney failure in most Nigerian studies.[2,4,6,10] This may remain so until infection is completely tackled in our environment.

Diabetes nephropathy appears to be on increase with equal prevalence to hypertensive nephropathy this study. This may have resulted from adoption of westernised life style in most Nigerian societies. The trend much be, otherwise we will experience explosion in the incidence of DM nephropathy.

CONCLUSION

The scourge of HIV related kidney disease and HIVAN is on the increased among our patients. Therefore full and early screening of all HIV positive patients should be instituted as a requirement for commencement of anti-retroviral therapy. This should also form part of the normal follow up screening.

Limitation

The inability to do kidney biopsy in our patients hindered the diagnosis of HIVAN. We therefore, suggest that early screening including kidney biopsy in suspected cases should be done.

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provide several units of fresh whole blood for transfusion within a relatively short period. The definite cause of the broad ligament haematoma could not be established although uncontrolled hypertension and unsupervised labour were potential risk factors in this patient.

Massive obstetric haemorrhage is not a recognized cause of peripartum cardiomyopathy[7,8] but this case report has raised the suspicion that massive obstetric haemorrhage, especially when associated with prolonged hypovolaemia could play a role in the aetiopathogenesis of this rare condition, as a component of multiple organ failure that could supervene. Peripartum cardiomyopathy, which aetiology is largely unknown is thought to be a form of idiopathic primary myocardial disease of pregnancy.[13] The massive obstetric haemorrhage may have contributed to this morbidity either as a predisposing factor or as an aetiological factor. Among the risk factors thought to contribute to peripartum cardiomyopathy are multiparity, maternal age above 30years, multifetal pregnancy, preeclampsia and African descent.[14]

In conclusion, severe obstetric haemorrhage remains one of the major causes of maternity mortality in Nigeria, although timely and appropriate interventions could prevent this catastrophe. Prolonged hypotension associated with severe obstetric haemorrhage in parturients may play a role in the aetiopathogenesis of peripartum dilated cardiomyopathy.

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with bands of adhesive plaster applied transversely over the wound for local pressure effect. Estimated blood loss at the end of surgery was 4500ml while she made 2200ml of clear urine by the end of surgery. Her pulse rate was 100b/m, and was regular with small volume. The blood pressure was 130/70mmHg.

She was transferred to the recovery room and later to the surgical intensive care unit (ICU) with ventilatory support while her condition remained clinically stable. Her postoperative medication included broad spectrum prophylactic antibiotics, intravenous fluids and analgesics. After severally hours in the surgical ICU, she initiated spontaneous respiration and her clinical condition improved progressively. The abdominal pack was removed 48hours after surgery and the wound closed by secondary suturing.

Within the first 10days after surgery, she received 5 additional units of fresh whole blood and these raised her PCV to 26%. Purulent discharge was noticed from the wound on the 5th postoperative day, which necessitated removal of some skin stitches and daily wound dressing. On the 7th postoperative day, the remaining skin stitches were removed as she had developed surgical wound sepsis.

The antibiotics were changed based on microbial sensitivity pattern and the surgical wound was dressed daily with satisfactory response.

By the 2nd week after surgery, she developed orthopnoea and clinical signs of cardiac failure. The cardiologist was invited to review and a diagnosis of dilated cardiomyopathy was made following clinical assessment and the results of her chest X-ray, electrocadiography and echocardiography. She was promptly commenced on fluid depleting and digitalizing therapy. She made an impressive response and started to recover and was discharged from hospital 4weeks after the laparotomy. She was seen every 2weeks at the postnatal clinic on 3 occasions with satisfactory recovery before discharge to the cardiologist for continued follow-up.

DISCUSSION

While some pregnant women continue to die from complications of pregnancy in developing countries due largely to failure to access emergency obstetric care or lack of essential resources in health facilities, others survive, although with short or long term morbidities. Survival depends on the ability of the woman to present early in a hospital and for interventions to be instituted promptly. The University of Uyo Teaching Hospital is a tertiary health institution, which is modestly equipped with health care facilities; and it has medical specialists in various disciplines to provide expert medical care to its patients.

The case reported is that of a 36year old unbooked multiparous woman, who attempted vaginal delivery in a traditional birth attendant's home in spite of the history of caesarean birth in her first pregnancy. This is one case too many, reported to confirm the aversion our women have towards caesarean section.[9,10] In spite of the counseling usually offered to the women on the need for antenatal care and hospital confinement in subsequent pregnancies, Ezechi et al. in their study discovered that 71.1% of Nigerian women would not accept c-section for any reason, and 26.8% of women who had caesarean scars preferred to die while attempting vaginal delivery.[9] The reason for this strong aversion towards c-section is deeply embedded in the culture of the people, which holds that caesarean delivery is tantamount to female reproductive failure.[9] The Nigeria Demographic Health Survey also reveals that only 36% of women deliver in health facilities, while 62% deliver in traditional birth attendants' homes or in their family homes.[11] The c-section that was performed on this patient on account of intrapartum haemorrhage could have normally resolved her problem save for the broad ligament haematoma, which was missed by the primary surgeon because the uterus was not exteriorized during the repair as is the practice by clinicians nowadays.[12] This report has brought to the fore a demerit of this practice.

Postoperative clinical surveillance helped in the timely decision to performed exploratory laparotomy when the patient's condition deteriorated following the c-section. This second surgical operation however became protracted due largely to the difficulty experienced in attaining haemostasis in the face of disseminated intravascular coagulopathy. The patient survived notwithstanding, because interventions were timely and appropriate; and the blood bank of the hospital demonstrated an exceptional capacity to

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Histopathological Review of Thyroid Diseases in A Sub-urban Tertiary Health Facility in the Tropics

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ABSTRACT

Diseases of the thyroid gland are common, and they can occur in any individual irrespective of the race. This retrospective study was designed to review of all haematoxylin and eosin stained slides of thyroid diseases diagnosed in the Olabisi Onabanjo University Teaching Hospital, Sagamu, Nigeria between January 2003 and December 2009 to determine the pattern of thyroid diseases among patients in the centre. The demographic data and clinical information about the patients were obtained from their case notes. A total of 62 thyroid biopsies from 55 females and 7 males were analysed during the period of the study. The age of patients with thyroid diseases ranged from 12 years to 90 years, with a peak age incidence of 74.2% in the 21- 50 years age group . The mean ages of 42.1 years, 38.0 years and 55.8 years were recorded for goiters, adenomas and carcinomas respectively. Multinodular goiter was the most common (46.8%) thyroid disease, and it accounted for highest numbers of non-neoplastic disease, being responsible for 58% of cases. Colloid goiters, toxic goiters and non-toxic goiters were the other types seen in 26.0%, 10.0% and 6.0% of cases respectively. Benign tumours were predominantly follicular adenoma type, accounting for 6 out of 12 cases of neoplastic diseases. Papillary carcinoma was the most frequent malignant tumour, accounting for 50% (3 out of 6) of malignant tumours. Follicular carcinoma was responsible for two (2) cases while medullary carcinoma accounted for one case. In conclusion, multinodular goiter was the most common thyroid diseases among patients in Sagamu, Nigeria with a predilection for females. Follicular adenoma and papillary carcinoma were the predominant benign and malignant thyroid tumours respectively.

Keywords: Histopathological, review, thyroid diseases, Goiter, Adenoma, Carcinoma and Nigeria.

INTRODUCTION

The thyroid is an endocrine gland that is located in the anterior aspect of the neck, and it could be affected by diseases that may be neoplastic or non-neoplastic in nature [1,2]. Thyroid diseases were initially thought to be rare in occurrence, although recent studies have demonstrated an increasing occurrence of thyroid disorders [3-5].

Thyroid diseases can occur in any age group, but young adults and people in their middle-age are most vulnerable to Hashimoto thyroiditis, Grave's disease, nodular goiter, and thyroid tumours [1,2]. Thyroid diseases are known to have a predilection for females[1,5-13]. Iodine deficiency, dietary substance, drugs like thiocyanates and propylthiouracil have been implicated in the causation of goiter [1-5,13]. Minerals including selenium, increase demand for thyroid hormones, and biosynthetic defects during hormone synthesis have also been implicated in the aetiopathogenesis of nodular hyperplasia of the thyroid glands [1-5,13]. The major risk factors for carcinomas of the thyroid gland are environmental factors including ionizing irradiation, Hashimoto thyroiditis, and long standing simple goiters, as well as genetic factors which include increased incidence of ras point mutation [1, 13]. The measurement of antibodies to thyroglobulin (TgAb) and thyroid peroxidase (TPOAb) using an ELISA technique are helpful in the management of auto-immune thyroid diseases such as Graves' diseases and Hashimoto thyroiditis [14].

This study is aimed at determining the pattern of thyroid diseases that occurred among patients in Sagamu, South-West Nigeria. The findings of this study will probably provide insight on the types of thyroid disorders that are prevalent among the people of South- West Nigeria.

PATIENTS AND METHODS

This was a retrospective study designed to review the histopathological reports of all thyroid biopsies that were submitted to the department of Morbid Anatomy and Histopathology of the

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THE CASE

Mrs AEJ was an unbooked 36year old G_4P_2 +1 civil servant, who presented to the labour ward of the University of Uyo Teaching Hospital with a 2hour history of intrapartum haemmorrhage, having been in labour at a traditional birth attendant's (TBA) home for about 12hours. Her obstetric history revealed that her first pregnancy resulted in an emergency caesarean delivery due to failure of induction of labour in the centre of case report, while she had a spontaneous vaginal delivery at a TBA's home in her second delivery. Both infants were alive and well. Preliminary clinical examination showed moderate degree of clinical palor, radial pulse of 100b/m, which was regular and of moderate volume. Her admission blood pressure was 160/110mmHg. The abdomen was enlarged with moderate tenderness in the suprapubic area and the fetal heart rate was 154b/min and regular. There was minimal vaginal bleeding, and the cervix was 6cm dilated.

A tentative diagnosis of intrapartum haemorrhage of undetermined cause with hypertension in pregnancy was made. The possibility of caesarean scar dehiscence was considered and she was resuscitated with intravenous fluids and 50mg of intravenous labetolol. The packed cell volume (PCV) was 29% and urinalysis result was not significant. An urgent obstetric ultrasonography helped to rule out placenta praevia and abruption. Four units of fresh whole blood were cross matched and she was promptly scheduled for an emergency repeat caesarean section (c-section) under general anaesthesia.

At caesarean section, she was found to have developed caesarean scar dehiscence, although a live infant weighing 3.0kg with satisfactory Apgar scores was delivered. The c-section was uneventful and the uterus was repaired without exteriorizing it. She was estimated to have lost about 1000ml of blood although there was no haemoperitoneum. One unit of whole blood was transfused intraoperatively.

Within 12hours following the c-section, she became increasingly pale with clinical signs of hypovolaemia and abdominal distension; there was no evidence of vaginal bleeding. She was transfused with 2 additional units of whole blood even though her urinary output was only 100ml.

The nephrologist was invited to review her and following clinical and laboratory evaluation, a diagnosis of acute renal failure- stage 3 due to severe hypovolaemia was made. A renal challenge was performed with an initial positive response but a relapse to anuria within 12hours of the challenge. The need for dialysis was contemplated but was never performed because the degree of creatinin derangement was not critical.

Twenty-four hours following the c-section, her vital signs remained unstable, and a decision was made to perform an exploratory laparotomy. Four units of blood were crossmatched and the general surgeon, haematologist and nephrologist were invited. The preoperative PCV was 10%.

The exploratory laparotomy, which was performed under general anaesthesia by an obstetrician and a general surgeon through an extended midline incision revealed an intact but atonic uterus with a large haematoma in the right broad ligament measuring 12cm by 8cm and extending into the right retroperitoneal space up to the inferior pole of the right kidney. There were two major rupture sites on the broad ligament and posterior parietal peritoneum due to overdistension by the haematoma with oozing of altered blood.

Surgery involved subtotal hysterectomy with attempts to secure haemostasis through a series of interrupted figure-8 stitches. It proved difficult to achieve haemostasis as blood continued to ooze from every puncture site and the haematoma bed. The possibility of disseminated intravascular coagulopathy was considered and later confirmed with significant intraoperative clotting profile, which showed significant derangement in the platelet count, prothrombin time, partial thromboplastine time with kaolin and thrombin time. The surgery lasted for 6hours while the patient received 5units of fresh whole blood, 5litres of crystalloids as well as calcium gluconate intravenously.

Eventually, the haemorrhage became minimal and local pressure was applied to the haematoma bed with sterile abdominal towels, while the abdominal incision was closed en masse partially leaving a window at the inferior end of the wound to allow for removal of the abdominal pack on a later date. The wound dressing was reinforced

Case Report

Massive Obstetric Haemorrhage Resulting in Severe Maternal Morbidity and Near-Miss in a Tertiary Health Facility in Nigeria

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ABSTRACT

A case of massive obstetric haemorrhage, which could have resulted in maternal mortality, saves for timely intervention and availability of resources for emergency management of the patient is reported. The woman was a 36year old unbooked multipara who presented with intrapartum haemorrhage and hypertension, for which she was resuscitated and an emergency caesarean section performed on her. Following delivery, her condition deteriorated with signs of hypovolaemia and abdominal distension. She received blood transfusions and an exploratory laparotomy was performed on her, when she was found to have developed an extensive right broad ligament haematoma, which extended to the retroperitoneal space. The surgery became protracted and involved subtotal hysterectomy and insertion of a series of haemostatic stitches to control haemorrhage. Several units of blood were transfused with disseminated intravascular coagulation supervening. Eventually, haemostasis was achieved through an unconventional technique of applying local pressure at the operation field with sterile abdominal towels. She developed postoperative wound sepsis and dilated cardiomyopathy for which she was treated in addition. Massive obstetric haemorrhage, when associated with prolonged hypovolaemia as in this case could result in the development of dilated cardiomyopathy.

Keywords: Massive obstetric haemorrhage, prolonged hypovolaemia, maternal morbidity, massive blood transfusion, dilated cardiomyopathy.

INTRODUCTION

The global burden of maternal mortality is borne largely by Sub-Saharan Africa and parts of Asia due to failure of governments in these regions to take deliberate steps to improve on the educational, socio-economic and infrastructural circumstance of vulnerable members of the public.[1,2]

About 70-80% of maternal mortality in affected countries arise from the five major causes namely: obstetric haemorrhage, pregnancy-related sepsis, hypertensive disorders of pregnancy, unsafe abortion and obstructed labour/uterine rupture.[3,4]

These complications of pregnancy, some of which are preventable only result in death when presentation in a health facility is delayed or essential health care resources needed for prompt intervention are lacking.[4]

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Nigeria, which prides itself as the giant of Africa because of its huge land mass and large human population equally has a high maternal mortality ratio of 630 per 100,000 live births.[5] While some Nigerian women die from complications of pregnancy, others survive with short or long term morbidities. These include, anaemia, anaemic heart failure, kidney failure and stroke.[6,7] Others are vesicovaginal fistula, intrauterine synechia, secondary infertility, pelvic sepsis and chronic pelvic pain.[6,7]

Women who suffer severe obstetric haemorrhage may develop secondary morbidities from massive blood transfusion such as acidosis, hypothermia and coagulopathy.[7,8]

This is the case report of a young unbooked multiparous woman who presented in the labour ward of our centre with complaints of intrapartum haemorrhage that snowballed into massive obstetric haemorrhage, which necessitated massive blood transfusion and subtotal hysterectomy. She survived but developed postpartum cardiomyopathy.

Olabisi Onabanjo University Teaching Hospital, Sagamu, South-West Nigeria between January 2003 and December 2009.

These thyroid specimens were received from the Surgery department of the hospital as well as from peripheral health facilities from the neighbouring states of Lagos, Oyo and Osun. Old slides were reviewed microscopically and where necessary, new slides were recut from stored paraffin embedded tissue blocks and stained with haematoxylin and eosin (H&E) stains. On few occasions, special stains including Congo red and silver impregnated Reticulin were done.

Information extracted from the patients' clinical notes and the surgical biopsy register included: age, and sex distribution of the patients, as well as the clinical summary and histological characteristics of the pathological lesions. Following the review of histological slides, diagnoses were modified as appropriate. Thyroid diseases were broadly categorized into: Colloid Goitres, Thyroiditis, Thyroglossal duct cysts, Diffuse hyperplasia, Adenoma and Malignant neoplasms using the WHO classification (IARC Lyon 2004) [15].

The data obtained were collated, analyzed and interpreted using inferential statistics. Results are presented in the form of numerical, percentages, simple proportion, tables and figures. The data were analysed using Microsoft Excel, Windows 2003.

RESULTS

Out of 2850 biopsies diagnosed during the 7-year period of the study, 62 were thyroid diseases accounting for 2.2% of the total. This represents a frequency of 9 cases per year.

Non-neoplastic diseases of thyroid gland were responsible for 50 (80.7%) cases, while the remaining 12 (19.3%) cases were accounted for by neoplastic tumours. The total numbers of neoplastic tumours were 12, with an equal number of benign and malignant thyroid tumours.

The age of patients with thyroid diseases ranged from 12 years to 90 years, with a peak age incidence in 21- 50 years age group (74.2%) and a mean age of 42.9 $\pm$ 2.03 years (see Table 1). The mean ages were 42.1 years, 38.0 years and 55.8 years were recorded for goiters, adenomas and carcinomas respectively.

There were 7 males and 55 females with a resultant male to female ratio of 1.0:8.0. Non-neoplastic diseases were commoner among females with a male to female ratio of 1.0:16.0. Benign tumours which were exclusively made up of follicular adenomas had a female preponderance with a male to female ratio of 1.0:5.0, whereas thyroid carcinoma was equitably distributed between males and females.

Multinodular goiter was the most common thyroid disease (46.8%) as well as accounting for highest numbers of non-neoplastic disease, accounting for 58% of cases. Colloid goiters, toxic goiters, and non toxic goiters were the other types seen in 13 (26%), 5(10%) and 3 (6%) of cases respectively (see Table 2).

The benign tumours were predominantly follicular adenoma, accounting for 6 out of 12 cases of neoplastic diseases. Papillary carcinoma was the most frequent malignant disease, accounting for 3 out 6 cases of malignant tumours. Medullary carcinoma and follicular carcinoma were the other types seen, with former accounting for one case and the latter being responsible for two cases. There was no case of anaplastic carcinoma, sarcomas, lymphomas or metastatic tumours seen in the study (see Figures 1,2 & 3). Inflammatory thyroid diseases were not seen in the study.

Features of hyperactivity and adenomatous hyperplasia were seen in 3 and 2 out of 29 multinodular goiters respectively. Three out of 13 colloid goiters showed evidence of degeneration while 4 out of 5 toxic goiters had features of involution. None of the malignant tumours showed evidence of metastasis.