Case Series

Clinical Presentations and Outcomes of Inexperienced Surgical Interventions in Specialized General Surgery Diseases: Case Series and Literature Review

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ABSTRACT

Background: The burden of responsibilities involved in surgical care constitutes 11.2% of the global burden of diseases, which makes it tightly regulated globally. This case series reported the clinical presentations and outcomes of inexperienced surgical interventions in specialized General Surgery diseases seen in Teaching Hospital over a period of a six months.

Materials and Methods: The clinical case notes of patients with non-specialist interventions in specialized General Surgery diseases over six months (February 2025-July 2025) were retrieved, and data were collected and analysed for the study.

Case Presentations: Case 1: A 45year old male who had fecal and urinary incontinence following biopsy/surgery on anal tumour. He was optimized, and offered exploratory laparotomy with temporary colostomy, and discharged to outpatient clinic for further review. Case 2: A 22-year-old male who developed intrabdominal sepsis following "surgery" done for appendicitis/appendix mass. He was optimized and had emergency exploratory laparotomy/appendicectomy, and drainage of 1.7litres of purulent fluid was drained. Case 3: A 33-year-old who developed enterocutaneous fistula following suturing of penetrating abdominal trauma wound. He was optimized and responded well on conservative management for enterocutaneous fistula. Case 4: A 49-year-old male with a huge tumour of the right arm mass of a football size. He developed a fungating ulcer and foul-smelling discharge and bleeding, after cuts were made on it.

Conclusion: This case series highlighted instances of aberrations in surgical management at the "grass-root" with preventable deteriorations in the clinical conditions of the patients involved. Regulatory actions and advocacies should therefore be upscaled.

Keywords: Case Series, Inexperienced surgical interventions, Presentations and outcome, General Surgery diseases.

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INTRODUCTION

Surgery, historically derived from the Greek word "Cheirourgía" comprising "Cheir" (hand) and "Ergon" (work) or the Latin word "Chirurgia", has evolved through times,[1, 2] into an art and science with practitioners in different highly specialized areas.[3-6] This has become very necessary as new information for improvement of patients care continue to emerge, requiring continuous update whose scope cannot be attained by a single individual. Additionally, surgical procedure from the perspective of the patient, has significant impact, known to "disrupt the patient's personal, professional, economic life, and the physical body", as has been highlighted by an earlier researcher.[7] There is little wonder therefore why any breach in operative procedure or patient care is taken seriously. In Nigeria, any act or behavior demonstrating "lack of proper care and attention; carelessness in behavior or conduct; a state of mind, which is opposed to intention; the breach of duty of care imposed by common law and statute resulting in damage to the complaint", is defined by the Supreme Court as negligence.[8]

Surgical diseases are reported to contribute to 11.2% of the global burden of diseases.[9, 10] Considering the burden of responsibilities involved in surgical care, it is often tightly regulated globally. It is a field where the enrollees were the best among equals, and the training institutions are very stringent in examination success/output of qualified surgical personnels.[11-15] This is even more stringent in the field of General Surgery.[16-18] Postgraduate medical training institutions in Nigeria are regulated through accreditations carried out by the West African College of Surgeons and the National Postgraduate Medical College of Nigeria (for certification),[19-21] and the Medical and Dental Council of Nigeria (for licensure).[22] To be a good surgeon therefore, certain qualities are acquired from years of structured training under the tutelage of many masters.[23-25] The is further shaped by blending the known principles of surgery and regional or local experiences/challenges that distinguishes surgeons from different parts of the world. Inexperienced incursions in this specialized area are therefore unthinkable and amounts to suicide without due training enrollment, certification and licensing, and the consequences rubs on families and the society.

The paradigm in the training of medical doctors within our subregion, was to produce a medical practitioner who could be surgically skilled to be useful to the society where he/she happens to be the only doctor around. Hence, emergency wound suturing; conduct of Caesarean section for a pregnant woman in labour in a rural setting; appendicectomies and herniorrhaphies were all emphasized as basic skills to be acquired by the medical practitioner serving in the tropics, as seen in the experiences of an author in Nigeria.[26] Aside from the courage needed to execute uncomfortable tasks with best of intensions, the surgeon should be guided by the principles of the art,[24] and importantly, know the complications, his limitations, and when not to operate. In the United Kingdom the role of surgical care practitioners (non-physicians) had been brought to the fore.[27] Although complications have been reported among newly qualified surgeons in western societies like the United States of America,[28] due to "shortage of surgeons" in Sub-Saharan African non-physicians have been involved in performance of surgeries, and challenges and barriers have been reported.[29] In Nigeria, non-medical doctors have been reported to be involved in carrying out surgical procedures,[30] and complications have also been reported.[31] The challenge is that not all trained practitioners acquire these skills, and not everyone have surgical interest. Additionally, the scope of surgical practices by non-specialists appears to be blurred, and location of these practices especially within cities need to be re-evaluated, with availability of desired trained specialists. A surge in these medical/surgical interventions sometimes beyond the scope of the experience of general duty doctors is therefore witnessed,[32-35] with consequent litigations.[36] The aim of this study was to report a series of presentations and outcome of inexperienced surgical interventions in specialized General Surgery diseases seen at the Rivers State University Teaching Hospital over a period of six months.

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CASE PRESENTATIONS

Table 1: Four Cases with the clinical features and outcome

Cases	Age	Sex	Clinical Presentation	Duration of Symptoms (Months) & Size of Mass	Treatment	Outcome / Follow Up
1	45years	Male	Fecal incontinence, anal pain, known RVD, history of anal procedure	One month, wide excised area around the anal orifice measuring about 6cm wide by 5cm deep	Exploratory Laparotomy & Colostomy	On follow up
2	22 years	Male	Abdominal pain and abdominal swelling	4 days	Emergency Exploratory Laparotomy, Adhesiolysis, Drainage of 1.7 litres of purulent collection, Appendicectomy	Recovered and discharged
3	33 years	Male	Penetrating wound following RTA, sutured wound, feculent discharge	5days, Wound measured 8cm x 5cm x 4cm	Optimization and Conservative Management	Responded to treatment
4	49 years	Male	Swelling of the right arm fungating ulcer and bleeding	4 years, Mass measured 28cm by 30 cm, ulcer measured 8cm by 10 cm	Wide local excision	On follow up

Case 1: A 45year old male with university education, presented to our surgical out-patient clinic with fecal incontinence and a history of biopsy/surgery at the anal region caried out about duration a month earlier. He was a known retroviral positive patient who was on highly active anti-retroviral therapy (HAART). Before the anal procedure, he had noticed a growth in the anal region associated with pain on defecation, passage of mucoid stool, frank red bleeding per rectum, change in bowel habits, weight loss, body weakness and abdominal pain. He is married in a monogamous setting with 2 children. Other parts of the history were not significant. Significant examination findings were pallor, tenderness at the suprapubic region, ascites, hypopigmented areas at the glans, poor perianal hygiene with wide excised area around the anal orifice measuring about 6cm wide by 5cm deep, and nodular lesion extending into the rectum. A diagnosis of locally advanced anal cancer in immunocompromised patient was made. He was optimized, and offered exploratory laparotomy with temporary colostomy, and discharged to outpatient clinic for review with histopathology report.

Case 2: A 22-year-old male student who abdominal pain and progressive abdominal swelling of 4/7 duration. There's associated history of fever, loss of appetite, easy satiety, weakness, constipation. He had been operated 12 days earlier in a peripheral private health facility for a suspected abdominal ultrasound diagnosis of appendiceal mass, but the appendix could not be removed or seen, and the abdomen was closed. Significant examination findings were: an acutely ill-looking young man in obvious painful distress, febrile (38.1°C), pale, dehydrated, anicteric, and no pedal oedema. Vital signs revealed a pulse rate of 113 beats per minute, blood pressure of 149/78mmHg, respiratory rate of 24 cycles per minute, oxygen partial pressure of 97%. The chest had normal findings. The cardiovascular system had normal findings except for tachycardia and a marginal blood pressure elevation. The abdomen was distended, firm, had a scar at the right iliac region and limited movement with respiration. It felt hard, there was generalized tenderness with rebound tenderness and bowel sounds were diminished. Abdominal ultrasound scan showed presence of free peritoneal fluid. A diagnosis of acute abdomen secondary to peritonitis (? perforation of hollow viscus) was made and patient was optimised. He was offered emergency exploratory laparotomy/appendicectomy, drainage of 1.7 litres of purulent fluid and the following were found: appendix abscess collection/gangrenous pelvic appendix bound in fibrinoid adhesion with intraperitoneal septic fluid,

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interloop abscesses, fibrinoid adhesions and encasement of the intestinal loops. Post-operatively patient recovered and was discharged stable clinical state.

Case 3: A 33-year-old male mechanic, who presented with complaints of foul-smelling purulent discharge from abdominal wound of 4 days duration. There's a preceding history of penetrating trauma following a road traffic accident five days earlier which was sutured at a "peripheral health facility" and patient was discharged home. The patient thereafter developed abdominal swelling, fever, constipation, abdominal pain. With increasing severity of symptoms, patient went to another health facility where the sutures over the left iliac fossa was removed and he was subsequently referred to our centre for further care. He was able to tolerate orally and pass some faeces through the anus. The significant examination findings at presentation were: an acutely ill middle-aged man, in obvious painful distress, febrile (Temp. 38.9 °C), pale, dehydrated, anicteric, no pedal oedema. There was a dirty soaked gauze dressing on the lower part of the abdomen; suturing marks over the left lumbar region; a wound over right iliac fossa involving skin and underlying tissues, measuring 8cm x 5cm x 4cm draining brownish foul smelling faecal matter with surrounding slough and granulation tissues; multiple bruises over the lower aspect of the abdomen. He was optimized, conservative management conservatively for enterocutaneous fistula, responded well with complete resolution, and was discharged home for follow-up.

Figure 1: Clinical photograph of Case 3 showing at presentation and with conservative care

Case 4: A 49-year-old male farmer and hunter with secondary level of education, who had noticed a swelling of the right arm which started as a "boil" 4 years ago (in year 2021). There was a rapid increase in size and occasional pain observed in the last 1 year leading to the current size of an adult football. He visited a "chemist shop" – a local medicine seller who made some cuts on the mass to let off "bad blood and pus". A sore thereafter developed with "protrusion of flesh" and foul-smelling discharge, and the wound had not healed. The patient was brought to the Emergency Department of the Hospital as a result of bleeding from the wound. There was associated history of losing weight, decreased appetite, tiredness, dizziness. The significant examination findings were: a huge fungating mass involving the whole of the right arm, mass measured 28cm by 30 cm with an ulcer on its medial side measuring 8cm by 10cm and having areas of necrosis and bleeding. The function of the distal limb was not affected. A diagnosis of soft tissue sarcoma (Dermatofibrosarcoma protuberans) was made, and patient was counselled for wide local excision.

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Figure 2: Clinical photograph of Case 4

DISCUSSION

The international surgical outcomes study group is concerned about poor patients' outcome after in-patient surgeries as reported in the findings from 474 hospitals in high, middle- and low-income countries.[37] A systematic review of met and unmet need of surgical disease in rural sub-Saharan Africa, identified some challenges and recommended the need to build up their capacity of health personnel for safe surgery and anesthesia.[38] What was probably not envisaged in these reports was the scope and severity of surgical interventions that could result from inexperienced surgical interventions going to tertiary healthcare centres. The spectrum of practitioners involved were "doctors", other healthcare staff, and even non-healthcare personnel. The non-specialists appeared to have more boldness in engaging in surgical acts that even the trained specialist personnel would not dare to do. The common denominator found in this case series was undesirable clinical experiences of patients in the inexperienced hands, who were probably not licensed to do the procedures the carried out. It is therefore a tip of the iceberg as data for this case series was obtained from a single centre all within a six-months period.

All the patients in this report were male; however, this may be coincidental. In Case 1, a middle-aged man had a generous excision of the anal region leaving him with incontinence of urine and faeces, wide and deep anal wound, and residual tumour. It was a procedure that was supposed to be a biopsy. However, the patient survived to tell the story. Apart from the trio of incontinence, open wound, and presence of a cancerous growth, this patient also had challenges with financing his medical treatment. This latter factor may have contributed to his patronage of "inexperienced personnel for a cancerous growth at rural hospital. Most cases of faecal incontinence reported in literature were following obstetric complications and surgeries for anorectal malformations,[39] and this type of iatrogenic faecal incontinence is often not considered among the causes in western studies.[40-42] However, a researcher from Nigeria, included complications of procedures performed by unqualified personnel among the etiological factors for genitourinary fistula in rural practice,[43] to which our observations find similarity.

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Reported in Case 2 was a young man who was operated for appendix mass/appendicitis, closed up with the pathology in situ, and patient developed life-training abdominal sepsis requiring laparotomy and evacuation of 1.7litres of purulent collections. The patient survived to tell the story. Although complications could occur following appendix surgery for which intra-abdominal abscess is one,[44] the appendix in this patient was not removed, or probably was not seen during the surgery that led to the complications. It is always emphasized by surgical teachers that "he who goes in to do appendicectomy must also know how to do laparotomy/right hemicolectomy and gynecologic surgeries for ovarian pathologies". This wise saying, if observed would have saved the day during the first surgery in this patient, as the patient's abdomen was rather closed-off with its attendant challenges. There is a global concerns on unwholesome practices in healthcare,[45] and in Nigeria, similar concerns have long been raised – calling for control.[46]

Case 3 was about a young man who developed intra-abdominal sepsis/enterocutaneous fistula following inappropriate suturing of the site of abdominal injury from a road traffic accident. Whether the fistula resulted from the primary road traffic accident injury or from the suturing may not be concretely ascertained. Although laparotomy remains the definitive mode of care for penetrating abdominal injuries, conservative management has been adopted for selected patients in major trauma centres especially for stable patients.[47] We adopted conservative approach in this patient because he was he was able to tolerate some oral feeds and pass flatus and some stool per ano, and was relatively stable with no generalized abdominal tenderness, and the outcome was favourable. Selective non-operative management is a recognised mode of care as reported in a recent study from a major trauma centre in the United Kingdom.[48]

In Case 4, a middle-aged man whose cancerous growth became worse following cuts made on it with consequent development of ulceration and bleeding. A proper planning with imaging investigations and a core needle biopsy would have been preferred.[49, 50] In our patient, the cuts resulted in ulceration and protrusion of the mass. The intention of the cut was only known to the treating "chemist medicine-man". However, based on the attitude of the local/rural people in our environment, the cut must have been made to "remove bad blood". This is practice of removal of "bad blood" has been reported in Zaria Nigeria where it was carried out by traditional healers.[51] Similar observations has been reported in other studies.[52-54] In our reported case, this practice was carried out in a "chemist (medicine dispensary) shop" in this modern age. It is unfortunate that many years after some authors have reported this type of practice impacting negatively on the public, that we still see them persisting in society.

Study Limitation: This study is a compilation of some specific cases on inexperienced surgical interventions in General Surgery diseases seen within six months. Although it could be a tip of the iceberg, it is from a single centre and therefore not generalizable. However, it has provided enough information to researchers to engage in prospective original study or a systematic review on the subject.

Implications of the findings

These experiences to have occurred in city, and few of these cares are reported in literature. The implications of the findings of this study highlight the fact that more still need to be done in monitoring, policy and research on the subject for improvement in surgical care. From the foregoing, there are needs to implement the underlisted actions by key stakeholders:

Actions For Government:

1. There is need to upscale monitoring and regulatory activities by agencies of government and professional organizations against unwholesome medical/surgical practices.
2. Governments should ensure provision of functional, effective and sustainable alternative surgical services at health facilities closer to the people through partnership/rotations with postgraduate surgical training centers.
3. There should be improvement in remuneration of available General Surgeons to encourage more specialization in the discipline and discourage brain drain – the "japa syndrome", which leaves the public with less doctor-patient ratio, a situation that encourages quack practices to thrive.
4. Consideration should be given to subsidizing of surgical health care at the grassroot.

Actions for Post-Graduate Training Colleges:

1. A scheme should be developed in Nigeria, where regional hospitals and health centres would be serviced

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by specialist surgeons in training as statutory requirements before final completion of their training. E.g., Specialist Senior Registrars in the specialties should serve in the rural areas before their final examinations.

CONCLUSION

This case series highlighted instances of aberrations in surgical management at the "grass-root" with preventable deterioration in the clinical conditions of the patients involved. The specialty of General Surgery and its practice are therefore evidentially encumbered by undesirable interferences by inexperienced non-specialists that impacts negatively impact on the health of the public, as seen in this series. Reasonable actions and advocacies are therefore needed from all quarters including well-wishers for improved surgical care of the society.

Declarations

Acknowledgement: We acknowledge the patients who graciously granted permission for a report of this cases series. The contribution of Dr Ambassador Nwinee is hereby acknowledged for assisting in identifying some of the cases presented in this study.

Ethics Statement: The approval of the research and Ethics Committee of the Rivers State University Teaching Hospital was obtained before commencement of the study.

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Conflict of Interest: None declared.

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