### ARTICLE IN PRESS



SURGERY FOR OBESITY AND RELATED DISEASES

Surgery for Obesity and Related Diseases ■ (2016) 00–00

## Original article

# Experience of a specialist emergency bariatric surgical service

Emma Rose McGlone, M.A., M.R.C.S., Alexandrina Roman, M.B.B.S., Ajit Kayal, F.R.C.A., Marcus Reddy, F.R.C.S., Omar Khan, Ph.D., F.R.C.S.\*

St. George's University Hospitals NHS Trust, London, United Kingdom Received January 11, 2015; accepted March 25, 2016

#### Abstract

**Background:** Bariatric surgery is associated with late and procedure-specific acute surgical complications. There is very little evidence available regarding the volume, nature, and outcomes of acute surgical admissions directly stemming from bariatric surgery. Centralization of bariatric elective services in the United Kingdom may have an adverse impact on the ability of local services to manage such unpredictable complications. To address this potential problem, we set up a comprehensive and specialist emergency bariatric service.

**Objectives:** The aim of this study was to quantify and characterize the workload of a specialist emergency surgical bariatric service.

**Setting:** University National Health Service hospital.

**Methods:** Over 2 years, we prospectively collected data on demographic characteristics, management, and outcomes of all acute surgical admissions related directly to previous bariatric surgery. **Results:** Between December 2011 and November 2013, 69 patients had 71 emergency admissions due to a surgical emergency directly related to previous bariatric surgery. Thirty-seven (54%) had undergone primary bariatric surgery at our institution, 13 (19%) at a different National Health Service hospital, 16 (23%) at private U.K. hospitals, and 3 (4%) at private overseas hospitals. Fortyfour endoscopic or surgical interventions were required, of which 17 (39%) were performed on nights or weekends and within 12 hours of admission. Of 27 operations, 25 (93%) were completed laparoscopically. Median length of stay was 2 days, there were no mortalities, and there was 1 readmission within 30 days.

**Conclusions:** There is a significant volume of late bariatric surgical emergencies, many requiring urgent intervention. These may be effectively managed by a specialist bariatric service. (Surg Obes Relat Dis 2016;**1**:00–00.) Crown Copyright © 2016 Published by Elsevier Inc. on behalf of American Society for Metabolic and Bariatric Surgery. All rights reserved.

Keywords:

Bariatric surgery; Emergency services; Specialization; Minimal access surgical procedures

The results of this paper were presented at the 2014 International Federation for the Surgery of Obesity and Metabolic Disorders (IFSO) annual conference in Montreal, Canada, in an oral presentation entitled "Impact of a specialist bariatric emergency surgical service—a prospective study" by O.A. Khan, A. Roman, E. McGlone, and M. Reddy. The abstract from this conference was published in *Obesity Surgery* 2014;24:1136–1378.

\*Correspondence: Omar Khan, Ph.D., F.R.C.S. Department of Bariatric Surgery, St. George's Healthcare NHS Trust, Blackshaw Road, London SW17 0QT, United Kingdom.

E-mail: omar.khan7000@gmail.com

In recent years in the United Kingdom, there has been a trend toward centralization of surgical services into a smaller number of specialist centers offering elective services to large populations distributed over a sizeable geographic catchment area. This has occurred in response to data demonstrating that service provision by subspecialized surgeons leads to improved patient outcomes in elective surgery [1–3]. As part of this centralization process, since 2008 all publicly funded elective bariatric surgery performed in the United Kingdom by the National Health

Service (NHS) has been confined to a small number of specially commissioned "supraregional" centers; these serve a large geographic area and encompass the catchment areas of several hospitals without specialist bariatric services.

Alongside this organizational change, there has been a contemporaneous increase in the number of bariatric procedures performed in the United Kingdom and United States. In 2013-2014, more than 10,000 patients underwent NHS bariatric procedures for obesity in the United Kingdom [4]; in the United States the figure approaches 200,000 annually [5]. In addition, there is a significant volume of private bariatric surgeries as well as so-called "surgical tourism" involving British citizens traveling abroad for bariatric surgery before returning to the United Kingdom, although it is difficult to quantify these events [6]. As a result, there is a growing population of post-bariatric surgery patients. These patients are at risk of developing surgical complications stemming from their bariatric device or procedure. Such complications can occur in the immediate postoperative period or many years after primary surgery, and affected patients will often present outside of normal elective surgery hours (i.e., at night or on weekends). In the United Kingdom, the majority of these patients are likely to attend their local hospitals—hospitals which, due to specialist commissioning, typically would not undertake elective bariatric surgery and therefore may lack the infrastructure and expertise to optimally treat postoperative bariatric patients. This is a particular problem, as there is now increasing recognition that post-bariatric patients often have procedure-specific pathologies requiring specialist knowledge to diagnose and treat [7]. In an attempt to address this issue and improve care for post-bariatric surgery patients, we set up a dedicated 24-hour emergency bariatric surgical service and prospectively recorded the activity and outcomes of this service. The objectives of the study were to quantify the volume of bariatric surgery emergencies presenting to this specialist service, characterize the nature of presenting emergencies, and analyze the ensuing management and short-term outcomes of patients.

#### Methods

Our institution is a high-volume NHS supraregional tertiary referral bariatric center for South London, performing over 300 primary and revision bariatric procedures per year. Between December 2011 and November 2013, 4 specialist bariatric consultant surgeons provided a comprehensive specialist emergency bariatric surgical service; at least 1 specialist consultant bariatric surgeon was available to attend to emergency cases at all times of day or night. In addition, a bariatric nurse specialist was available to advise patients by phone during working hours.

For this study, data were collected on all patients admitted under our bariatric service with an emergency relating to previous bariatric surgery. This included patients referred from other hospitals or from nonbariatric consultants working in our own institution who admitted bariatric patients as part of their routine emergency on-call service. It should be noted that although the service was primarily designed to serve our regional catchment area, there were no restrictions on the type (i.e., public or private) or geographic location of hospitals that sent referrals. All clinically appropriate patients referred to our service were accepted under our care.

It should be noted that we only accepted patients with an emergency directly related to a previous bariatric procedure, regarded by both referring general surgeon and accepting bariatric surgeon as requiring urgent specialist expertise beyond the scope of the nonspecialist general surgeon. As such, we excluded simple band deflation, gallstone disease, chronic stricture, or nonperforated ulcer in bariatric patients. We also excluded all patients admitted from bariatric clinics.

Demographic information relating to all patients referred to our specialist service was prospectively recorded. In addition, all surgical procedures undergone by these patients were recorded. Time of surgery was noted in order to assess whether procedures were performed during nights or weekends (hereby defined as surgery performed between 20:00 and 08:00 hours, or between 20:00 hours on Friday and 08:00 hours on Monday, times that no bariatric surgeon would normally have been expected to be available before commencement of the study period). Perioperative outcomes, including all complications as defined and classified by the Clavien–Dindo system [8], were recorded on a prospectively collated database as per hospital protocol, and then retrospectively analyzed for the purposes of this study.

#### Results

Over the 2-year study period, there were 71 surgical emergency admissions directly related to previous bariatric surgery, in 69 patients. Of these, 37 (54%) had undergone previous bariatric surgery at our NHS institution, 13 (19%) at a different NHS hospital, 16 (23%) at private U.K. hospitals and 3 (4%) at private overseas hospitals. Sixty-one patients were female (90%), and the mean age of the cohort was 39 years. The primary bariatric operations performed and patients' clinical presentations on referral to our specialist emergency bariatric service are shown in Table 1.

Five patients (7%) were readmitted between 7 and 14 days post–primary surgery, all from our own institution. In 4 cases readmission was due to leaks after laparoscopic sleeve gastrectomy and in 1 to a leak after laparoscopic gastric bypass. The remaining admissions all occurred more than 30 days after primary procedure.

In terms of definitive primary investigations, 45 patients had computed tomography of the abdomen, 5 underwent a gastrograffin swallow study, and 3 had a radiologically guided band deflation. All of these investigations took place

# Download English Version:

# https://daneshyari.com/en/article/6110829

Download Persian Version:

https://daneshyari.com/article/6110829

<u>Daneshyari.com</u>