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ЕЖЕМЕСЯЧНЫЙ НАУЧНЫЙ ЖУРНАЛ

Медицинские новости Грузии

საქართველოს სამედიცინო სიახლენი

GEORGIAN MEDICAL NEWS

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GMN: Georgian Medical News is peer-reviewed, published monthly journal committed to promoting the science and art of medicine and the betterment of public health, published by the GMN Editorial Board since 1994. GMN carries original scientific articles on medicine, biology and pharmacy, which are of experimental, theoretical and practical character; publishes original research, reviews, commentaries, editorials, essays, medical news, and correspondence in English and Russian.

GMN is indexed in MEDLINE, SCOPUS, PubMed and VINITI Russian Academy of Sciences. The full text content is available through EBSCO databases.

GMN: Медицинские новости Грузии - ежемесячный рецензируемый научный журнал, издаётся Редакционной коллегией с 1994 года на русском и английском языках в целях поддержки медицинской науки и улучшения здравоохранения. В журнале публикуются оригинальные научные статьи в области медицины, биологии и фармации, статьи обзорного характера, научные сообщения, новости медицины и здравоохранения. Журнал индексируется в MEDLINE, отражён в базе данных SCOPUS, PubMed и ВИНИТИ РАН. Полнотекстовые статьи журнала доступны через БД EBSCO.

GMN: Georgian Medical News – საქართველოს სამედიცინო სიახლენი – არის ყოველთვიური სამეცნიერო სამედიცინო რეცენზირებადი ჟურნალი, გამოიცემა 1994 წლიდან, წარმოადგენს სარედაქციო კოლეგიისა და აშშ-ის მეცნიერების, განათლების, ინდუსტრიის, ხელოვნებისა და ბუნებისმეტყველების საერთაშორისო აკადემიის ერთობლივ გამოცემას. GMN-ში რუსულ და ინგლისურ ენებზე ქვეყნდება ექსპერიმენტული, თეორიული და პრაქტიკული ხასიათის ორიგინალური სამეცნიერო სტატიები მედიცინის, ბიოლოგიისა და ფარმაციის სფეროში, მიმოხილვითი ხასიათის სტატიები.

ჟურნალი ინდექსირებულია MEDLINE-ის საერთაშორისო სისტემაში, ასახულია SCOPUS-ის, PubMed-ის და ВИНИТИ РАН-ის მონაცემთა ბაზებში. სტატიების სრული ტექსტი ხელმისაწვდომია EBSCO-ს მონაცემთა ბაზებიდან.

WEBSITE

www.geomednews.com

К СВЕДЕНИЮ АВТОРОВ!

При направлении статьи в редакцию необходимо соблюдать следующие правила:

1. Статья должна быть представлена в двух экземплярах, на русском или английском языках, напечатанная через **полтора интервала на одной стороне стандартного листа с шириной левого поля в три сантиметра**. Используемый компьютерный шрифт для текста на русском и английском языках - **Times New Roman** (**Кириллица**), для текста на грузинском языке следует использовать **AcadNusx.** Размер шрифта - **12**. К рукописи, напечатанной на компьютере, должен быть приложен CD со статьей.

2. Размер статьи должен быть не менее десяти и не более двадцати страниц машинописи, включая указатель литературы и резюме на английском, русском и грузинском языках.

3. В статье должны быть освещены актуальность данного материала, методы и результаты исследования и их обсуждение.

При представлении в печать научных экспериментальных работ авторы должны указывать вид и количество экспериментальных животных, применявшиеся методы обезболивания и усыпления (в ходе острых опытов).

4. К статье должны быть приложены краткое (на полстраницы) резюме на английском, русском и грузинском языках (включающее следующие разделы: цель исследования, материал и методы, результаты и заключение) и список ключевых слов (key words).

5. Таблицы необходимо представлять в печатной форме. Фотокопии не принимаются. **Все цифровые, итоговые и процентные данные в таблицах должны соответствовать таковым в тексте статьи**. Таблицы и графики должны быть озаглавлены.

6. Фотографии должны быть контрастными, фотокопии с рентгенограмм - в позитивном изображении. Рисунки, чертежи и диаграммы следует озаглавить, пронумеровать и вставить в соответствующее место текста **в tiff формате**.

В подписях к микрофотографиям следует указывать степень увеличения через окуляр или объектив и метод окраски или импрегнации срезов.

7. Фамилии отечественных авторов приводятся в оригинальной транскрипции.

8. При оформлении и направлении статей в журнал МНГ просим авторов соблюдать правила, изложенные в «Единых требованиях к рукописям, представляемым в биомедицинские журналы», принятых Международным комитетом редакторов медицинских журналов - http://www.spinesurgery.ru/files/publish.pdf и http://www.nlm.nih.gov/bsd/uniform_requirements.html
В конце каждой оригинальной статьи приводится библиографический список. В список литературы включаются все материалы, на которые имеются ссылки в тексте. Список составляется в алфавитном порядке и нумеруется. Литературный источник приводится на языке оригинала. В списке литературы сначала приводятся работы, написанные знаками грузинского алфавита, затем кириллицей и латиницей. Ссылки на цитируемые работы в тексте статьи даются в квадратных скобках в виде номера, соответствующего номеру данной работы в списке литературы. Большинство цитированных источников должны быть за последние 5-7 лет.

9. Для получения права на публикацию статья должна иметь от руководителя работы или учреждения визу и сопроводительное отношение, написанные или напечатанные на бланке и заверенные подписью и печатью.

10. В конце статьи должны быть подписи всех авторов, полностью приведены их фамилии, имена и отчества, указаны служебный и домашний номера телефонов и адреса или иные координаты. Количество авторов (соавторов) не должно превышать пяти человек.

11. Редакция оставляет за собой право сокращать и исправлять статьи. Корректура авторам не высылается, вся работа и сверка проводится по авторскому оригиналу.

12. Недопустимо направление в редакцию работ, представленных к печати в иных издательствах или опубликованных в других изданиях.

При нарушении указанных правил статьи не рассматриваются.

REQUIREMENTS

Please note, materials submitted to the Editorial Office Staff are supposed to meet the following requirements:

1. Articles must be provided with a double copy, in English or Russian languages and typed or compu-ter-printed on a single side of standard typing paper, with the left margin of **3** centimeters width, and **1.5** spacing between the lines, typeface - **Times New Roman** (**Cyrillic**), print size - **12** (referring to Georgian and Russian materials). With computer-printed texts please enclose a CD carrying the same file titled with Latin symbols.

2. Size of the article, including index and resume in English, Russian and Georgian languages must be at least 10 pages and not exceed the limit of 20 pages of typed or computer-printed text.

3. Submitted material must include a coverage of a topical subject, research methods, results, and review.

Authors of the scientific-research works must indicate the number of experimental biological species drawn in, list the employed methods of anesthetization and soporific means used during acute tests.

4. Articles must have a short (half page) abstract in English, Russian and Georgian (including the following sections: aim of study, material and methods, results and conclusions) and a list of key words.

5. Tables must be presented in an original typed or computer-printed form, instead of a photocopied version. **Numbers, totals, percentile data on the tables must coincide with those in the texts of the articles.** Tables and graphs must be headed.

6. Photographs are required to be contrasted and must be submitted with doubles. Please number each photograph with a pencil on its back, indicate author's name, title of the article (short version), and mark out its top and bottom parts. Drawings must be accurate, drafts and diagrams drawn in Indian ink (or black ink). Photocopies of the X-ray photographs must be presented in a positive image in **tiff format**.

Accurately numbered subtitles for each illustration must be listed on a separate sheet of paper. In the subtitles for the microphotographs please indicate the ocular and objective lens magnification power, method of coloring or impregnation of the microscopic sections (preparations).

7. Please indicate last names, first and middle initials of the native authors, present names and initials of the foreign authors in the transcription of the original language, enclose in parenthesis corresponding number under which the author is listed in the reference materials.

8. Please follow guidance offered to authors by The International Committee of Medical Journal Editors guidance in its Uniform Requirements for Manuscripts Submitted to Biomedical Journals publication available online at: http://www.nlm.nih.gov/bsd/uniform_requirements.html
http://www.icmje.org/urm_full.pdf
In GMN style for each work cited in the text, a bibliographic reference is given, and this is located at the end of the article under the title "References". All references cited in the text must be listed. The list of references should be arranged alphabetically and then numbered. References are numbered in the text [numbers in square brackets] and in the reference list and numbers are repeated throughout the text as needed. The bibliographic description is given in the language of publication (citations in Georgian script are followed by Cyrillic and Latin).

9. To obtain the rights of publication articles must be accompanied by a visa from the project instructor or the establishment, where the work has been performed, and a reference letter, both written or typed on a special signed form, certified by a stamp or a seal.

10. Articles must be signed by all of the authors at the end, and they must be provided with a list of full names, office and home phone numbers and addresses or other non-office locations where the authors could be reached. The number of the authors (co-authors) must not exceed the limit of 5 people.

11. Editorial Staff reserves the rights to cut down in size and correct the articles. Proof-sheets are not sent out to the authors. The entire editorial and collation work is performed according to the author's original text.

12. Sending in the works that have already been assigned to the press by other Editorial Staffs or have been printed by other publishers is not permissible.

Articles that Fail to Meet the Aforementioned Requirements are not Assigned to be Reviewed.

ავტორთა საყურადღებოდ!

რედაქციაში სტატიის წარმოდგენისას საჭიროა დავიცვათ შემდეგი წესები:

1. სტატია უნდა წარმოადგინოთ 2 ცალად, რუსულ ან ინგლისურ ენებზე,დაბეჭდილი სტანდარტული ფურცლის 1 გვერდზე, 3 სმ სიგანის მარცხენა ველისა და სტრიქონებს შორის 1,5 ინტერვალის დაცვით. გამოყენებული კომპიუტერული შრიფტი რუსულ და ინგლისურენოვან ტექსტებში - **Times New Roman (Кириллица)**, ხოლო ქართულენოვან ტექსტში საჭიროა გამოვიყენოთ **AcadNusx.** შრიფტის ზომა – 12. სტატიას თან უნდა ახლდეს CD სტატიით.

2. სტატიის მოცულობა არ უნდა შეადგენდეს 10 გვერდზე ნაკლებს და 20 გვერდზე მეტს ლიტერატურის სიის და რეზიუმეების (ინგლისურ, რუსულ და ქართულ ენებზე) ჩათვლით.

3. სტატიაში საჭიროა გაშუქდეს: საკითხის აქტუალობა; კვლევის მიზანი; საკვლევი მასალა და გამოყენებული მეთოდები; მიღებული შედეგები და მათი განსჯა. ექსპერიმენტული ხასიათის სტატიების წარმოდგენისას ავტორებმა უნდა მიუთითონ საექსპერიმენტო ცხოველების სახეობა და რაოდენობა; გაუტკივარებისა და დაძინების მეთოდები (მწვავე ცდების პირობებში).

4. სტატიას თან უნდა ახლდეს რეზიუმე ინგლისურ, რუსულ და ქართულ ენებზე არანაკლებ ნახევარი გვერდის მოცულობისა (სათაურის, ავტორების, დაწესებულების მითითებით და უნდა შეიცავდეს შემდეგ განყოფილებებს: მიზანი, მასალა და მეთოდები, შედეგები და დასკვნები; ტექსტუალური ნაწილი არ უნდა იყოს 15 სტრიქონზე ნაკლები) და საკვანძო სიტყვების ჩამონათვალი (key words).

5. ცხრილები საჭიროა წარმოადგინოთ ნაბეჭდი სახით. ყველა ციფრული, შემაჯამებელი და პროცენტული მონაცემები უნდა შეესაბამებოდეს ტექსტში მოყვანილს.

6. ფოტოსურათები უნდა იყოს კონტრასტული; სურათები, ნახაზები, დიაგრამები - დასათაურებული, დანომრილი და სათანადო ადგილას ჩასმული. რენტგენოგრამების ფოტოასლები წარმოადგინეთ პოზიტიური გამოსახულებით **tiff** ფორმატში. მიკროფოტოსურათების წარწერებში საჭიროა მიუთითოთ ოკულარის ან ობიექტივის საშუალებით გადიდების ხარისხი, ანათალების შეღებვის ან იმპრეგნაციის მეთოდი და აღნიშნოთ სურათის ზედა და ქვედა ნაწილები.

7. სამამულო ავტორების გვარები სტატიაში აღინიშნება ინიციალების თანდართვით, უცხოურისა – უცხოური ტრანსკრიპციით.

8. სტატიას თან უნდა ახლდეს ავტორის მიერ გამოყენებული სამამულო და უცხოური შრომების ბიბლიოგრაფიული სია (ბოლო 5-8 წლის სიღრმით). ანბანური წყობით წარმოდგენილ ბიბლიოგრაფიულ სიაში მიუთითეთ ჯერ სამამულო, შემდეგ უცხოელი ავტორები (გვარი, ინიციალები, სტატიის სათაური, ჟურნალის დასახელება, გამოცემის ადგილი, წელი, ჟურნალის №, პირველი და ბოლო გვერდები). მონოგრაფიის შემთხვევაში მიუთითეთ გამოცემის წელი, ადგილი და გვერდების საერთო რაოდენობა. ტექსტში კვადრატულ ფჩხილებში უნდა მიუთითოთ ავტორის შესაბამისი N ლიტერატურის სიის მიხედვით. მიზანშეწონილია, რომ ციტირებული წყაროების უმეტესი ნაწილი იყოს 5-6 წლის სიღრმის.

9. სტატიას თან უნდა ახლდეს: ა) დაწესებულების ან სამეცნიერო ხელმძღვანელის წარდგინება, დამოწმებული ხელმოწერითა და ბეჭდით; ბ) დარგის სპეციალისტის დამოწმებული რეცენზია, რომელშიც მითითებული იქნება საკითხის აქტუალობა, მასალის საკმაობა, მეთოდის სანდოობა, შედეგების სამეცნიერო-პრაქტიკული მნიშვნელობა.

10. სტატიის ბოლოს საჭიროა ყველა ავტორის ხელმოწერა, რომელთა რაოდენობა არ უნდა აღემატებოდეს 5-ს.

11. რედაქცია იტოვებს უფლებას შეასწოროს სტატია. ტექსტზე მუშაობა და შეჯერება ხდება საავტორო ორიგინალის მიხედვით.

12. დაუშვებელია რედაქციაში ისეთი სტატიის წარდგენა, რომელიც დასაბეჭდად წარდგენილი იყო სხვა რედაქციაში ან გამოქვეყნებული იყო სხვა გამოცემებში.

აღნიშნული წესების დარღვევის შემთხვევაში სტატიები არ განიხილება.

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Содержание:

TRENDS IN GENERAL SURGERY PROCEDURE TYPES AND THEIR OUTCOMES FOR A NEWLY COMMISSIONED HOSPITAL

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Abstract.

Aim: We sought to describe the types and frequencies of surgeries conducted in our newly commissioned hospital and to correlate procedure types with length of hospital stay and postoperative complications.

Material & Methods: This study is a retrospective quantitative chart review design, using patient records. It's conducted in a newly commissioned tertiary care academic hospital. Following systematic screening of medical records, approximately 377 patients were expected to satisfy the eligibility criteria. All extracted data were coded and entered into Microsoft Excel for initial collection and verification. Statistical analysis was completed using IBM SPSS Statistics, version 27.

Results: A total of 377 patients underwent general surgical procedures, with a mean age of 35.81 years (SD ± 14.44). Male patients comprised 58.9% and Saudi nationals 82.8%. The most common procedures were laparoscopic cholecystectomy (22.8%), inguinal hernia repair (13.3%), and epidermal cyst excision (13.0%). General anaesthesia predominated (44.0%), with a significant association between anaesthesia type and procedure ($p < 0.001$). Most cases (94.4%) were managed as day surgery ($p = 0.035$). we noted that no postoperative complications were recorded at 30-day follow-up, as zero incidence of surgical site infection, urinary tract infection, deep vein thrombosis, readmission, or reoperation.

Conclusions: This study documents the primary surgical profile of a recently commissioned tertiary hospital, revealing a diverse, mainly elective cases with zero postoperative complications, readmissions, or reoperations. These results reproduce effective perioperative preparation from the beginning and found a respected starting point for ongoing excellence benchmarking and hospital development.

Key words. General surgery, day surgery, academic hospital, Saudi Arabia, Qassim.

Introduction.

Previously, the preparation for surgeries was the important step prior to operating the surgery, reduce adverse events, decrease the morbidity and mortality rate. The best hospitals reported improved the surgery outcomes with less hospital length of stay and lower complication rates [1]. Common comorbidities and routine of life risk factors such as malnutrition, dyslipidemia, increase blood pressure, uncontrolled glucose level, and smoking use are all connected with high readmission rates and death after surgery [1, 2]. Patient characteristics contribute as a factor in inducing complication and readmission rates [2]. General surgery results remain a concern even with improvements in practices, anesthesia, preoperative preparation and postoperative care [3]. In Saudi Arabia; Albabtain et al. start thinking about the discharge the patient over the weekend could play a role in readmission rate and postoperative complication however the results came against his expectation as they found no association between Weekend discharge and readmission rate [4]. Current evidence shows a international move in surgical case mix, with an increasing rate of surgeries being completed in ambulatory care settings as day case surgeries, and major and high-risk cases are focused in admitted for inpatients hospital care [5]. Newly hospitals signify a unique setting for assessing surgical trends and results. [6]. Different than well-known hospitals, these hospitals regularly practice developing surgical volumes, manpower revision, and open-minded application of clinical governance frameworks [6-8]. Understanding procedural patterns and related outcomes in such settings is crucial for benchmarking performance, recognizing gaps in patient care, and guiding strategic planning [9-10]. In time of worldwide surgical literature remains to inflate, our data in the Middle East have historically been light [3]. Previous study conclusions show important variances in surgical outcomes occur across several hospitals and areas globally. These differences are attributed to many reasons, including surgeon proficiency, hospital capacity, case mix, perioperative policies and Procedures, and resource accessibility [11]. While in Middle East comparable disease load to Western nations, there is a shortage of in print statistics on general surgery outcomes. That's why, directing a wide-ranging investigation of local data is vital for understanding just how the Saudi Arabia healthcare system links to global standards [11]. This helps recognize subjects that require quality improvement for upgrading in clinical practices and patient outcomes inside the nation [11].

In this research we sought to describe the types and frequencies of surgeries conducted in our newly commissioned hospital and to correlate procedure types with length of hospital stay and postoperative complications.

Materials and Methods.

Study design:

This study is retrospective quantitative chart review design, using patient records at Qassim University Medical City. Medical records from surgeries from January 2024 to December 2025 were reviewed.

Study Setting:

The study was conducted at Qassim University Medical City, a newly commissioned tertiary care academic hospital that provides comprehensive surgical services to a diverse patient population across the Qassim region.

Study Population and Sample Size:

The study population comprised all patients admitted between January 2024 and December 2025. A consecutive sampling approach was adopted, whereby all admissions within the defined period were initially considered for inclusion. Following systematic screening of medical records, approximately 377

patients were expected to satisfy the eligibility criteria, with the precise figure to be confirmed upon completion of the record review.

Eligibility Criteria.

Inclusion Criteria:

Patients were eligible for inclusion if they were (1) had undergone at least one surgical procedure during their hospital stay, and (2) had complete medical records available for review, including documented procedure details, admission and discharge information, and postoperative outcomes.

Exclusion Criteria:

Patients were excluded if they had (1) incomplete or inaccessible medical records that precluded adequate data extraction, or (2) been transferred to another healthcare facility prior to the completion of their surgical procedure.

Data Collection:

Data were extracted from the hospital's Health Information System (HIS) using a pre-structured data collection sheet developed specifically for this study. The following variables were captured for each eligible patient: demographic characteristics (age, sex, and nationality); the type of surgical procedure performed; the type of anesthesia administered; admission and discharge dates and times; and postoperative outcomes, including discharge status, surgical site infection (SSI), urinary tract infection (UTI), and unplanned return to the operating room. In line with ethical standards for patient confidentiality, no personally identifiable information, such as patient names or national identification numbers, was recorded at any stage of the data collection process.

As the retrospective nature of the study and the availability of a pre-validated data collection instrument, the study utilized data from the Hospital Information System registry, which records significant general surgery procedures performed at hospital between 22024 and 2025.

Data Management and Statistical Analysis:

All extracted data were coded and entered into Microsoft Excel for initial collection and verification. Statistical analysis was completed using IBM SPSS Statistics, version 27.

Descriptive statistics were applied to characterize the study population. Categorical variables are expressed as frequencies and percentages, while continuous variables are reported as means with standard deviations.

For inferential analyses, the Chi-square test or Fisher's exact test was used to evaluate associations between categorical variables, such as the incidence of SSI across different surgical procedure types. The independent samples t-test or the Mann-Whitney U-test was applied for comparisons of continuous variables, such as hospital length of stay across procedure categories depending on the distribution of the data. A two-tailed p-value of less than 0.05 was considered the threshold for statistical significance throughout all analyses.

Results.

A total of 377 patients underwent General Surgery procedures at Qassim University Medical City during the study period. Demographic data for the study cohort are summarized in Table 1. of the 377 patients, 222 (58.9%) were male and 155 (41.1%) were female, a male to female ratio about 1.4:1. The common of patients were Saudi nationals, accounting for 312 cases (82.8%), while 65 patients (17.2%) were non-Saudi, reflecting the various population served by the institution as well as the trust form Saudi patients toward this institution.

Across the cohort as presented in Table 2. The mean patient age was 35.81 years (SD ± 14.44), with an age range spanning from 3 to 84 years. This varied age replicates the varied clinical conditions managed within the general surgery service, from pediatric cases to old age patients. The mean operative length of stay was 473.25 minutes (SD ± 115.12), with individual stays ranging from 107 to 754 minutes.

The anesthesia techniques used is presented in Table 3. General anesthesia was the most frequently utilized technique, administered in 166 cases (44.0%). Spinal anesthesia was used in 99 cases (26.3%), reflecting its suitability for a range of perineal and lower abdominal procedures. Local anesthesia accounted for 111 procedures (29.4%), mainly used for superficial soft tissue surgeries. Regional anesthesia was used in only one case (0.3%).

The surgical procedures performed during the study period presented in Table 4. Laparoscopic cholecystectomy was the most commonly performed procedure, covering 86 cases (22.8%), then inguinal hernia repair with mesh in 50 cases (13.3%), and epidermal cyst excision in 49 cases (13.0%). Excision of pilonidal sinus accounted for 44 procedures (11.7%), while examination under anesthesia with or without fistulotomy or seton insertion was performed in 30 cases (8.0%). Fewer procedures included ingrowing toenail excision (24 cases, 6.4%), breast mass excision (21 cases, 5.6%), hemorrhoidectomy (20 cases, 5.3%), excision of lipoma (19 cases, 5.0%), and excision of skin lesion (4 cases, 1.1%). Additionally, 30 cases (8.0%) were categorized under other surgeries. (Table 4)

In correlation of surgery type with anesthesia technique as presented in Table 5, A statistically significant association was identified between procedure type and anesthesia modality ($p < 0.001$), indicating that anesthesia technique assigned was not accidental or randomly selected but carefully associated with surgery needs. All laparoscopic cholecystectomies ($n = 86$) and breast mass excisions ($n = 21$) were performed exclusively under general anesthesia. On other hand, spinal anesthesia was the mainly selected for perianal procedures, being used in 25 of 30 examination-under-anesthesia cases (83.3%), 18 of 20 hemorrhoidectomies (90.0%), and 38 of 44 pilonidal sinus excisions (86.4%). Local anesthesia was specially selected for superficial procedures, including 48 of 49 (98.0%) epidermal cyst excisions and 23 of 24 (95.8%) ingrowing toenail excisions. These patterns validate the high level of communication between the perioperative team.

The association between surgical procedure type and patient admission status (day surgery versus inpatient) as shown in Table 6. A statistically significant was found between surgery type and admission category ($p = 0.035$). The majority of patients 356 out of 377 (94.4%) were managed as day surgery cases, and 21 (5.6%) required inpatient admission. Procedures with the highest inpatient rates included inguinal hernia repair with mesh (9 of 50 cases, 18.0%) and laparoscopic cholecystectomy (5 of 86

Table 1. *Demographic characteristics of the study population.*

Demographics	Item	Number	Percentage
Gender	Male	222	58.9%
	Female	155	41.1%
Nationality	Saudi	312	82.8%
	Non-Saudi	65	17.2%

Table 2. *Continuous clinical variables: age and length of stay.*

Item	Average (Std.)	Min-Max
Age (years)	35.81(14.44)	3 - 84
Length Of Stay(Minutes)	473.25(115.117)	107 - 754

Table 3. *Distribution of anesthesia types across the surgical cases.*

Anesthesia Type		
	N	%
General	166	44.0%
Local	111	29.4%
Regional	1	0.3%
Spinal	99	26.3%

Table 4. *Distribution of surgical procedures performed during the study period.*

Type of Surgery	N	%
Examination Under Anesthesia +Fistulotomy +Seton Insertion	30	8.0%
Breast Mass Excision	21	5.6%
Laparoscopic Cholecystectomy	86	22.8%
Hemorrhoidectomy	20	5.3%
Inguinal Hernia Repair with Mesh	50	13.3%
Epidermal Cyst Excision	49	13.0%
Ingrowing Toenail Excision	24	6.4%
Excision of Lipoma	19	5.0%
Excision of Pilonidal Sinus	44	11.7%
Excision of Skin Lesion	4	1.1%
Other Surgeries	30	8.0%

Table 5. *Cross-tabulation of surgical procedure type and anaesthesia technique.*

Type of Surgery and Anesthesia Technique							
		Anesthesia Technique				Total	P Value
		General	Local	Regional	Spinal		
Type of Surgery	Examination Under Anesthesia +/- Fistulotomy +/- Seton Insertion	5	0	0	25	30	< 0.001
	Breast Mass Excision	21	0	0	0	21	
	Laparoscopic Cholecystectomy	86	0	0	0	86	
	Hemorrhoidectomy	2	0	0	18	20	
	Inguinal Hernia Repair with Mesh	36	0	0	14	50	
	Epidermal Cyst Excision	1	48	0	0	49	
	Ingrowing Toenail Excision	0	23	0	1	24	
	Excision Of Lipoma	2	15	0	2	19	
	Excision Of Pilonidal Sinus	4	2	0	38	44	
	Excision Of Skin Lesion	0	4	0	0	4	
	Other Surgeries	9	19	1	1	30	
Total		166	111	1	99	377	

Table 6. *Association between surgical procedure type and patient admission status.*

Surgery Type and Patient Status				
Type of Surgery	**Patient Status**		**Total**	**P Value**
	One Day Surgery	**In-Patient**		
Examination Under Anesthesia +Fistulotomy Seton Insertion	29	1	30	0.035
Breast Mass Excision	21	0	21	
Laparoscopic Cholecystectomy	81	5	86	
Hemorrhoidectomy	19	1	20	
Inguinal Hernia Repair with Mesh	41	9	50	
Epidermal Cyst Excision	48	1	49	
Ingrowing Toenail Excision	24	0	24	
Excision Of Lipoma	18	1	19	
Excision Of Pilonidal Sinus	42	2	44	
Excision Of Skin Lesion	4	0	4	
Other Surgeries	29	1	30	

cases, 5.8%). while breast mass excisions and ingrowing toenail excisions were performed completely as one day surgery. These findings highlight the mainly ambulatory nature of the surgery at this hospital, constant with modern trends supporting day surgery vision where clinically fitting.

Finally; postoperative outcomes were strictly evaluated for all 377 patients for the five most common postoperative complications: surgical site infection (SSI), urinary tract infection (UTI), deep vein thrombosis (DVT), unplanned readmission, and return to the operating room.

Remarkably, no postoperative complications were recorded for the all cases during the study period with 30-days postoperative follow up. The incidence of SSI, UTI, and DVT was zero in all cases, nevertheless of procedure type, anesthesia techniques, or admission status. As well as, no unplanned readmissions and no cases needing reoperation.

Discussion.

Our study delivers an initial operational shape of the general surgery at Qassim University Medical City, as newly commissioned tertiary care hospital. The results tell a cases commonly elective procedures, a mainly one day surgery of care, clinically suitable anesthesia use, and absence of postoperative complications, readmissions, or reoperations across all 377 cases, this results give meaningful understandings into the presentation of a promising general surgery outcomes in the region.

The operative volume at Qassim University Medical City was considered as a mix of general surgery conditions that closely reflects patterns experimental in both regional and international hospitals. Laparoscopic cholecystectomy was the most frequently performed procedure (22.8%), followed by inguinal hernia repair with mesh (13.3%), epidermal cyst excision (13.0%), and excision of pilonidal sinus (11.7%). This data is reliable with results from a large multicenter retrospective cohort conducted across Ministry of Health hospitals in Saudi Arabia, in which cholecystectomy, hernia repair, and appendectomy constituted the dominant procedural categories [3,4]. indicating the epidemiologic problem of gallstone disease, abdominal wall hernias, and anorectal conditions in the region.

The importance of soft tissue and skin procedures with epidermal cyst excision, pilonidal sinus excision, and lipoma removal show the role of a one-day surgery in addressing high volume, low risk that are agreeable to ambulatory care. This case mix is generally characteristic of what is naturally met in newly established surgery services, where elective low risk cases frequently lead during the commissioning phase of hospital volume growth [6]. Hospital volume preparation literature admits that newly commissioned hospitals classically experience rising procedure volumes and advanced case difficulty [6].

The study cohort had a mean age of 35.81 years (SD ± 14.44), reflecting a relatively young surgical case. Which is in agreement with the demographic shape of Saudi Arabia, where the population is broadly young, and elective general surgery cases such as hernias, gallstones, and benign soft tissue lesions tend to current in the age of 30 years and 40 years [3,4] The male predominance (58.9%) observed in this study likewise aligns with previous Saudi surgical studies [4].

The wide age range (3–84 years) shows that the service succeeded patients with the full age range, including pediatric and old age cases. Effective hospital management and staff preparation have been revealed to be critical in confirming that such diverse patient populations take timely and suitable surgical care [8].

A statistically significant correlation was detected among surgery type and anesthesia technique ($p < 0.001$), The prevalence of general anesthesia (44.0%) and the comparatively high use of spinal anesthesia (26.3%) are reliable with the nature of the cases. Spinal anesthesia is extensively favored for perianal procedures and inguinal hernia repairs due to its favorable risk acceptance, quicker recovery time, and lesser rates of postoperative nausea, features that are mostly beneficial in a one-day surgery cases [4].

The common of patients (94.4%) was treated as one day surgery cases, with only 21 patients (5.6%) requiring inpatient admission. This high rate of one day surgery is an outstanding result, shiny both the elective, low risk nature of the cases and the hospital promise to ambulatory surgery care vision. Recent surgical systems globally have progressively gone outpatient-based care for fitting surgeries, as this method cuts hospital length of stay, lowers costs, and improves patient throughput without compromising safety [5,6].

A large multicenter retrospective study conducted across Saudi Arabia reported an overall 30-day major complication rate (Clavien-Dindo grade III–V) of 11.1% and a 30-day mortality rate of 0.74% (3), with lower-risk procedures such as appendectomy, cholecystectomy, and hernia repair showing the most favorable outcomes. In contrast, the absence of complications in our study is notable; however, it may in part reflect the mainly elective, low-risk, and ambulatory nature of the cases.

Benchmarking of surgical quality results is a known foundation of quality enhancement. As Boëlle et al. projected, performance benchmarking outlines that join structure, process, and outcome indicators including SSI rates, are vital for classifying excellence and driving hospital learning [9]. In this situation, the zero SSI rate detected now, while hopeful, should be understood combined with the recognition that SSI investigation in newly opened hospitals may not yet have touched the full sensitivity of established reporting systems. Lyman et al. have supported for outcome situational awareness the actual, customized follow up of surgical outcomes as the next borderline in quality improvement, arguing that hospital-level statistics essential be completed by surgeon specific and procedure specific feedback to sustain perfection over time [10].

Local surgical outcome statistics from Middle East continue limited comparative to the bulk of evidences from Western healthcare systems [3]. our study add to a small but growing body of literature supporting clinical movement and outcomes within the region. The case mix, demographic data, and surgical outcomes informed here are broadly consistent with findings from prior Saudi studies [3,4] supporting their generalizability within the regional background.

Cross-institutional and cross-national assessments of surgical results are fundamentally limited by differences in case mix, demographic data, and follow-up protocols [11].

As any study we have limitations; First, the retrospective chart review design is characteristically liable to documentation bias and incomplete data capture, second; the study period corresponds to a premature stage of hospital operation, during which elective, low risk surgeries. Specifically, the finding of zero postoperative complications across all 377 cases warrants critical interpretation in the context of documentation bias. In newly commissioned hospitals, electronic health information systems and complication-reporting workflows are frequently still in their developmental stages. As a consequence, adverse events that occurred outside the hospital setting, such as superficial surgical site infections managed in primary care or unplanned presentations to other facilities, may not have been captured within the institutional records reviewed. The absence of complications may therefore partly reflect underreporting attributable to immature surveillance infrastructure rather than an entirely true zero-complication rate; however we addressed this issue by utilizing the follow up phone calls for all cases at day 31 postoperatively in order to confirm the absence of the postoperative complications. Future prospective studies with standardized, active follow-up mechanisms would be necessary to confirm these outcomes with greater confidence. Third, the short 30-day follow-up window may not capture late complications or readmissions beyond this period.

Conclusion.

This study documents the primary surgical profile of a recently commissioned tertiary hospital, revealing a diverse, mainly elective cases with zero postoperative complications, readmissions, or reoperations. These results reflect effective perioperative preparation from the outset and provide a valuable starting point for ongoing quality benchmarking and hospital development.

Conflict of interest.

The author declares no conflict of interest.

Ethical approval.

Prior to beginning the study, approval was obtained from the Committee of Research Ethics, Deanship of Graduate Studies and scientific Research, Qassim University with the approval #25-41-03.

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