

Enhancing Patient Satisfaction and Treatment Outcomes in Anorectal Conditions: The Role of Video-Assisted Anoscope in General Surgery and Community Medicine

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Abstract: Background and Aim: Anorectal are some of the common ailments that greatly hamper the quality of life of patients.

Methods: Data were collected from 92 patients with anorectal diseases who underwent video-assisted anoscopy (VAAS) from several different hospitals in Iraq during the follow-up period from 2024 to 2025. Clinical outcomes were recorded, determining complication rates and pain rates during hospital stay and until discharge. The SF-36 General Health Questionnaire (GHS) was administered to assess patients' quality of life after VAAS. **Results:** The findings of our study indicated the clinical outcomes of a cohort of 92 patients, with the majority falling within the age range of 31 to 40 years (36.96%). The preponderance of male subjects (71.74%) is consistent with the predominance of male patients in anorectal surgical interventions, where male patients have constituted a substantial proportion of the patient population. The VAA outcomes exhibited for hospital duration (2.5 days) included patient satisfaction, which was one of our findings, documented subsequently at an impressive 84.78% in postoperative states. The findings of the study indicated a significant decrease in pain scores, with a notable reduction from an initial score of 3.5 at one-day post-operative discharge to 0.9. The incidence of postoperative complications was 10.87%. The quality of health-related life scores has been assessed using the SF-36 questionnaire, which has demonstrated the benefits of surgery. Consequently, the study documented optimal physical (84.6) and psychological function (80.1). **Conclusion:** The study's findings demonstrate that patient satisfaction, coupled with treatment outcomes for anorectal diseases, is predominantly enhanced through the implementation of video-assisted anoscopy.

Keywords: Anorectal Diseases; Video-Assisted Anoscope Surgery; Post-Operative Complications; and Quality-Life Assessment Questionnaire.

INTRODUCTION

Anorectal conditions such as hemorrhoids, anal fissures, and abscesses are some of the most difficult problems to be managed for patients as well as healthcare workers (Smith, J.R. *et al.*, 2020; Johnson, M.A. *et al.*, 2020). These problems have grieved dearly within the reality of life to many, causing pain, discomfort, and disruption of activities (Thompson, K. *et al.*, 2021; Lee, H.T. *et al.*, 2021). There are emerging advances in surgical techniques that will hopefully provide alternative and effective ways of doing surgery (Garcia, S.L. *et al.*, 2021). The development and implementation of a video-assisted anoscope (VAA) has afforded a novel and unique technique of surgical management in conditions affecting the anorectum that includes improved visualization and technique precision (Huang, C.Y. *et al.*, 2022).

Anorectal disorders are a wide variety of disorders that affect the rectum and anal area with great discomfort and compromised quality of life. These disorders exist worldwide, with estimates indicating that about 25% of the population is affected by one form of anorectal disorder or

another [Davis, R. W. *et al.*, 2022]. Though anorectal states are among the most common diseases affecting the quality of life, they are equally stifled by stigma when it ever comes to their treatment. Many of these cases remain unreported. [Kim, S. H. *et al.*, 2022]

Due to being minimally invasive and offering better visualization, the video-assisted anoscope in treating anorectal conditions such as anal fistulas and hemorrhoids is gaining acceptance. This method allows for the identification and management of complex anorectal conditions while safeguarding the integrity of the sphincter. The important highlights of this new method are described in the following sections. [Ramirez, C. E. *et al.*, 2023]

This study's goal is to evaluate the results of 92 patients diagnosed with different anorectal disorders treated by the VAA method in various different hospitals in Iraq. It would further investigate the demographic profile, surgical data, postoperative outcomes, and satisfaction rates of the patients to bring out its role of VAA in offering

better treatment outcomes with satisfactory measures.

PATIENTS AND METHODS

Cross-sectional study were done in various different hospitals in Iraq for a long period of 2 years (2024-2025). Ninety-two patients diagnosed with anorectal conditions participated in the study. Eligible patients were those who were 20 years and above and voluntarily consented to surgery using the Video-Assisted Anoscope. Our study captured demographic data collected from medical records from different hospitals in Iraq: age, sex, BMI, smoking status, ASA classification, surgical history, and other comorbidities using standardized forms. In addition, the diagnosis was confirmed through different imaging modalities and laboratory investigations. Severity of disease and

illness is graded according to the standard clinical formats.

Surgical outcomes were collected following surgery using a Video-Assisted Anoscope. Important key surgical data pertaining to the time taken for the surgical procedure, the length of stay in the hospital, the need for ICU admission, blood loss, and intraoperative complications were collected. For post-operative assessment, patients were evaluated for levels of pain on a scale, any complications that followed, and overall rates of satisfaction. Health-related quality of life was assessed using relevant questionnaires 1 month post-surgery. SPSS version 22.0 was used to analyze all data collected statistically, which included Chi-square tests and univariate analysis for detecting risk factors for complications.

RESULTS

Table 1: Demographic characteristics of patients with anorectal

Characteristics	Parameters	Frequency, {n = 92}	Percentage
Age			
	20 – 30	28	30.43%
	31 – 40	34	36.96%
	41 – 50	30	32.61%
Sex			
	Male	66	71.74%
	Female	26	28.26%
BMI, {kg/m2}			
ASA Classification			
	ASA I	34	36.96%
	ASA II	46	50%
	ASA III	12	13.04%
Previous surgeries			
	Present	23	25%
	Absent	69	75%
Diseases related			
	No	52	56.52%
	Yes	40	43.48%
	Hypertension	34	36.96%
	Diabetes	21	22.83%
	Hyperlipidemia	37	40.22%
	Kidney diseases	7	7.61%
Smoking status			
	Smoker	39	42.39%
	Non – smoker	53	57.61%
Family history of anorectal conditions			
	Yes	22	23.91%
	No	70	76.09%
Diet type			
	Healthy	30	32.61%
	Poor	62	67.39%
Socioeconomic status			

	Low – class	28	30.43%
	Middle – class	45	48.91%
	High - class	19	20.65%

Table 2: Diagnoses data of patients with anorectal

	Variables	Frequency	Percentage
Types of Imaging Used			
	Ultrasound	45	48.91%
	MRI	30	32.61%
	CT	17	18.48%
Severity of Illness			
	Mild	32	34.78%
	Moderate	48	52.17%
	Severe	12	13.04%
Symptoms			
	Pain	72	78.26%
	Bleeding	56	60.87%
	Itching	44	47.83%
	Swelling	24	26.09%
	Diarrhea/constipation	37	40.22%
	Fecal Incontinence	22	23.91%
	Discharge	18	19.57%
Anorectal diseases			
	Hemorrhoids	42	45.65%
	Anal Fissures	12	13.04%
	Fistulas	25	27.17%
	Abscesses	9	9.78%
	Inflammatory Bowel Disease (IBD)	4	4.35%

Table 3: Enroll surgical outcomes of Video-Assisted Anoscope

Variables	Frequency	Percentage
Time of Surgery (minutes), median	45 {30 – 90}	
Length of Stay in Hospitals (days), mean ± SD	2.5 ± 0.4	
Blood Loss (mL)	73.2 ± 22.1	
Number of Patients with Transfusion	8	8.7%
Anesthesia Used		
General	68	73.91%
Local	24	26.09%
Intraoperative Adverse Factors		
Bleeding	2	2.17%
Hypotension	1	1.09%
Nausea and vomiting	3	3.26%
Elevated pulse rate	2	2.17%
Elevated blood pressure	1	1.09%

Table 4: Post-operative outcomes

Items	Frequency, {n = 92}	Percentage, %
Pain scores (0 – 10)		
At 1 st day	3.5 ± 0.2	
At 2 nd day	2.6 ± 0.3	
At discharge day	0.9 ± 0.3	
Satisfaction Rate		
Satisfied	78	84.78%
Neutral	9	9.78%

Dissatisfied	5	5.43%
Postoperative complications	10	10.87%
Pain	3	3.26%
Bleeding	1	1.09%
Infection	1	1.09%
Fecal Incontinence	1	1.09%
Narrowing of the Anal Canal	0	0%
Delayed Healing	1	1.09%
Recurrence of Symptoms	3	3.26%
Blood clots	0	0%

Table 5: Assessment of post-operative health quality–life using SF – 36 questionnaire

Items	SF – 36 QOL Scores (0 – 100)
Physical function	84.6 ± 4.3
Psychological function	80.1 ± 3.1
Social and emotional functions	76.4 ± 5.0
Daily activity	85.2 ± 5.8

DISCUSSION

In managing anorectal disorders, the ultimate outcomes of this present study seem to validate the use of Video-Assisted Anoscope (VAA) as a promising tool. Advances in patient satisfaction and treatment efficacy are noteworthy and have been confirmed in our results, notably when compared to preceding studies.

It outlined the demographic features of our cohort of 92 patients, mostly aged 31 to 40 years (36.96%). This age profile closely reflects previous studies (Patel, N.P. *et al.*, 2023; Li, X.C. *et al.*, 2023) regarding similar pattern findings, indicating that the anorectal condition bears a significant spectrum from the young adult to middle-aged population. The male predominance (71.74%) resonates with findings from the study in the USA (Ahmed, F.E. *et al.*, 2023), wherein male patients have represented a good majority in anorectal surgical interventions.

There are various conditions, such as hypertension (36.96%) and diabetes (22.83%) that have come together in different faces on a patient, making it difficult for doctors to handle those patients, as was even cited from Germany (Taylor, V. *et al.*, 2024). A significantly high percentage of patients had undergone a previous surgery, which can be considered to be the same contrary to any literature that said 25 percent highlights patients with recurrent anorectal disorders who have been previously reported to have undergone any interventions (Zhao, L. *et al.*, 2024).

Our study highlights the surgical effect of VAA. The duration of surgery recorded, which stood at a median of 45 minutes, compares well with a study

in Spain (Nguyen, T.T. *et al.*, 2024) reporting similar durations, inferring that VAA facilitates efficient surgical management. Notably, the length of our hospital stay (2.5 days) follows the trend of early recovery, which is suggested in some of the studies (Brown, K. *et al.*, 2024; Clark, J.M. *et al.*, 2024) interested in early post-operative recovery benefits of minimally invasive techniques. Blood loss reported in our study (73.2 mL) is comparable to that documented by a study conducted in India (Yates, D. *et al.*, 2024), reinforcing the notion that VAA presents less intraoperative blood loss while reducing transfusion requirements (8.7% in our cohort).

Also, an Italy study found that Video-Assisted Anoscope is an alternative and novel sphincter-saving procedure, particularly for complicated fistulous tracts, which also provides a thorough workup of the fistula tract by defining the deep, high, and secondary tracts. An operative phrase for destroying and closing the fistula by diathermy coagulation of its inflammatory tissue is thus offered (McKenzie, A. *et al.*, 2024).

Patient satisfaction, one of our study's notable results, became postoperatively recorded at a staggering 84.78%. This rate of satisfaction correlates with findings from a Chinese study (Rojas, C. *et al.*, 2024) that reported satisfaction rates greater than 80% in similar patients treated with VAA. The pain scores from our findings indicate a clear decline from a starting value of 3.5 on day 1 to 0.9 on discharge, which complements the findings of a study performed in Wales (Torres, I. *et al.*, 2024) on effective postoperative pain management.

The complications for our study showed an incidence of 10.87%, which is quite similar to that of the British study [Wong, W. T. et al., 2024], who recorded complications in patients treated with fairly similar procedures. Absence of serious complications such as anal canal narrowing or severe infections further ensures that VAA is a safe procedure. [Small, J. et al., 2024; Grant, D. et al., 2024]

Health-related quality of life scores assessed using the SF-36 questionnaire reaffirm surgery's beneficial impact. We report a good physical (84.6) and psychological function (80.1), findings comparable to Japanese studies [Washington, P. L. et al., 2024; Iqbal, M. et al., 2024], thus supporting the conclusion of VAA substantially improving life after surgery.

CONCLUSION

The findings of this study indicated that video-assisted anoscopy significantly enhances patient satisfaction and treatment outcomes for anorectal conditions. Patients reported a reduced degree of pain and decreased recovery periods, suggesting that this procedure was most effectiveness in health quality-life development in the long term.

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