CASE REPORT

Acute Haemorrhagic Rectal Ulcer Syndrome: An Uncommon Cause of Exsanguinating Haematochezia

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ABSTRACT

Acute hemorrhagic rectal ulcer syndrome (AHRUS) is a seldom-seen source of substantial, painless rectal bleeding, typically found in elderly individuals who frequently have multiple concurrent health conditions. The precise underlying causes of this condition remain elusive, as do the most effective treatment approaches. This report presents a case involving an elderly male who experienced profuse rectal bleeding, was diagnosed with AHRUS, and successfully managed through endoscopic intervention. This case report underscores the challenges in diagnosing AHRUS and highlights the importance of considering this syndrome in elderly patients with painless, massive rectal bleeding after excluding other potential causes.

Keywords: Acute haemorrhagic rectal ulcer syndrome, haematochezia

International Journal of Human and Health Sciences Vol. 09 No. 01 January'25

DOI: http://dx.doi.org/10.31344/ijhhs.v9i1.772

INTRODUCTION

Acute haemorrhagic rectal ulcer syndrome (AHRUS) is an uncommon clinical entity, characterized by ulcers(s) in the rectum, close to the dentate line. These lesions are reported more frequently in elderly individuals burdened with multiple coexisting health conditions. The precise mechanisms driving their formation remain elusive, resulting in severe, exsanguinating, and life-threatening rectal bleeding. The ulcer(s) are typically located near the dentate line in the rectum.[1-3] We here report a case of AHRUS managed with a combination of medical resuscitation and endoscopic intervention.

Case Report

A 72-year-old male presented with a history of haematochezia of one day duration. His medical history included systemic arterial hypertension, diabetes mellitus, and a previous ischemic stroke. His prescription medications included losartan, insulin, atorvastatin, multivitamins, and aspirin. He had no history of gastrointestinal bleeding, chronic constipation, or altered bowel habits. At presentation, he was actively bleeding per rectum, pale with hypotension, and tachycardia. The patient received immediate resuscitation with intravenous fluids, followed by blood transfusion and other supportive measures. Laboratory tests revealed anemia (hemoglobin level of 5.4 g/dl) and leukocytosis (total count of 14,300 cells/cmm with 80% polymorphs), while platelet count, prothrombin time, and activated partial thromboplastin time fell within normal ranges. Biochemical analysis showed hyperkalemia (serum potassium level of 5.8 mEq/dl), renal impairment (serum creatinine level of 2.1 mg/dl), and mild elevations in transaminase levels (alanine aminotransferase at 76 U/L and aspartate aminotransferase at 63 U/L).

Following initial stabilization, the patient was taken up for an urgent flexible sigmoidoscopy

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without bowel preparation. The examination revealed blood-stained contents in the rectum and a sizable ulcer measuring approximately 5 cm in diameter in the distal rectum, immediately proximal to the dentate line. An overlying clot was also observed (Figure 1). Adrenaline injections were administered in multiple quadrants of the rectal mucosa surrounding the ulcer. Subsequently, the clot was gently dislodged, revealing a visible vessel (Figure 1) managed with thermocoagulation. Supportive measures were continued, and antiplatelets were withheld. The following day, he was administered oral bowel preparation and re-evaluated with upper and lower gastrointestinal endoscopies. Colonoscopy revealed an otherwise normal mucosa, without colonic diverticula or blood in the lumen. Multiple mucosal biopsies were taken from the ulcer margins. During the biopsy, it was noted that the rectal lesion exhibited a soft consistency, which contrasts with the typical firm and gritty feel commonly associated with solitary rectal ulcer syndrome. An upper gastrointestinal endoscopy was performed and found to be unremarkable. Abdominal imaging, including ultrasound and computed tomography, yielded normal results except for evidence of fatty liver, without signs of cirrhosis or portal hypertension. Histopathological analysis of the biopsied tissue revealed epithelial denudation, mucosal neutrophilic inflammatory infiltrates, and microvascular thrombi. There were no features to suggest a neoplasm or solitary rectal ulcer syndrome. No inclusion bodies were identified, and tissue polymerase chain reactions for cytomegalovirus and herpes simplex viruses returned negative results. The presentation of massive, painless rectal bleeding in a patient with multiple comorbidities, a distal rectal ulcer, and characteristic histological findings led to the diagnosis of AHRUS.

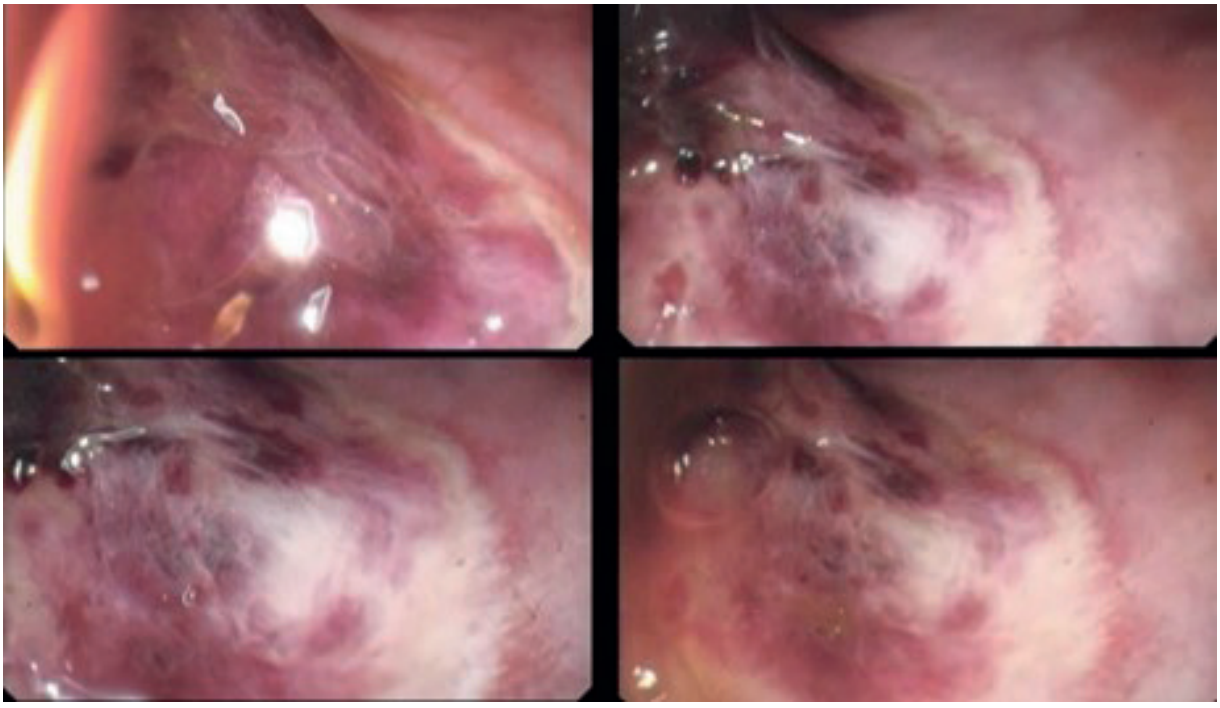

Figure 1: Rectal ulcer with an overlying blood clot and ulcer with the visible vessel after partly dislodging the clot.

DISCUSSION

The earliest indications of acute haemorrhagic rectal ulcer syndrome (AHRUS) trace back to 1974 when Delancy & Flitch documented acute and potentially life-threatening rectal hemorrhages stemming from isolated ulcers in the rectum[1]. The nomenclature "acute haemorrhagic rectal ulcer" was initially proposed by Soeno et al. in 1981[2]. It has been observed in individuals of both genders, with an average age of presentation at approximately 71.2 years[1,2]. The etiopathogenesis of AHRUS remains elusive. One postulated mechanism suggests a stress-related circulatory dysfunction mediated by vasoactive peptides. To date, infectious agents have no confirmed

involvement in the causation of this syndrome[1]. A characteristic presentation often observed is the occurrence of massive rectal bleeding, particularly in elderly and critically ill patients. Diagnosis necessitates endoscopic examination, revealing single or multiple rectal ulcers, which may take various forms, including rounded, geographical, or circumferential ulcers, often near the dentate line[1-5]. Histological evaluation typically discloses superficial necrosis, acute inflammatory cell infiltration, and indications of recent hemorrhage, predominantly confined to the mucosal layer[2-4]. Although no definitive guidelines exist for treating this condition, local therapeutic approaches are usually effective in achieving hemostasis in most cases. Treatment options include local injection, thermocoagulation, transanal suture ligation, and, infrequently, angioembolization or surgical intervention[1-7].

Differential diagnoses for rectal ulcers encompass infectious ulcers, ischemic ulcers, solitary rectal ulcers, stercoral ulcers, traumatic ulcers, and iatrogenic ulcers caused by factors such as radiation or non-steroidal analgesics[1]. Our patient had no history of radiation exposure, non-steroidal analgesic use, or local trauma. He had no history of chronic constipation or altered bowel habits, which predispose to stercoral and solitary rectal ulcers. As mentioned before, the feel during the endoscopic biopsy procedure was not suggestive of solitary rectal ulcer syndrome. Furthermore, the histological characteristics associated with solitary rectal ulcer syndrome, inflammatory bowel disease, and infectious ulcers were not present. Bowel ischemia typically manifests with abdominal pain, which is notably absent in our case. Additionally, colonic ischemia typically involves the splenic flexure and sigmoid colon rather than the rectum. He did not have any ulcers in the rest of the gastrointestinal tract, nor had any other demonstrable source of bleed. The clinical, endoscopic, and histological features, along with the exclusion of other potential diagnoses, collectively supported the diagnosis of AHRUS in our patient.

CONCLUSION

Acute hemorrhagic rectal ulcer syndrome is an uncommon cause of massive haematochezia. It is often a diagnosis of exclusion; a timely sigmoidoscopy or colonoscopy helps in diagnosis and management. Including AHRUS in the list of potential differential diagnoses is crucial when assessing elderly patients experiencing severe and life-threatening haematochezia.

Conflict of interest: The authors have no potential conflict of interest.

Funding statement: Nil.

Ethical approval: This case report is published with the written informed consent from the patient and permission from the hospital authoruty.

Authors' contribution: Both the authors were involved in patient management, data gathering, compilation, literature search and review, manuscript writing, editing and final submission.

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LETTER TO EDITOR

To:

The Right Honourable Sir Lindsay Hoyle,
U.K. Parliament,
The House of Commons,
London SW1A OAA,U.K.

Dear Sir Lindsay,

In my capacity as Chairman of The Global Council for Islamic Biomedical Ethics (GCIBE), I am forwarding to you Fatwas, the essence of which has been reiterated by Grand Muftis in several countries addressing the controversial issue of "Physician-Assisted Suicide" bill awaiting voting on November 29th 2024 in The British House of Commons.

The fact that several Muslim Grand Muftis raised voice, is a sign of great concern. As indicated in the attached Fatwas (please see enclosed sample translation thereof), the concern is not only over Muslims being drawn into this scheme. It rather promulgates unequivocally great concern over human life in general. Human life is sacred according to Islamic teachings, regardless of tenet, religion, race or nationality of the potential candidates targeted by the proposed bill in question.

In principle, medicine and science in general are said to be "APOLITICAL". The fact that your Health Minister, Mr. Stephen Kinnock, has said he will vote in favour of the assisted dying bill, which is in sharp conflict with his own boss Wes Streeting, the Health Secretary, who will oppose it, strongly confirms that principle. This shows that these two politicians have two conflicting judgement premises, resulting in a skewed equation

which could inflict unforeseen agony on a wide sector of society. Professionally, Mr. Kinnock seems to be off the basic facts of his own responsibilities as Health Minister, which include Palliative Care. Is he missing the point of view expressed by his own boss, the Health Secretary, who clearly states that his concerns are backed up by Marie Curie, who reports that one in four people in the UK die without the palliative care that they need? The Health Secretary has even confirmed in an interview that he will vote against the Leadbeater Bill because he does not believe palliative care in the UK is good enough to give people a real choice -adding: "I worry about coercion and the risk that the right to die feels like a duty to die on the part of, particularly, older people."

It is rather inappropriate on the part of our GCIBE, in a rational debate on a serious matter like this, to go down the subjective route others might trespass, where Mr. Kinnock is said to be merely jockeying for prominence by adopting the trend the Prime Minister is trying to establish for political gains.

That skewed equation speaks loud and clear that the issue should be addressed only by experts. These include entities of deep insight of the issue; into its etiology, social causes, outcomes and effects on the public, such as organisations of well documented records. These include for instance "The Royal College of General Practitioners", and the "Association of Palliative Medicine". Expert guidance points out the facts that this practice would:

- erode confidence of the public in the healthcare system,
- weaken society's respect for the sanctity of life,
- establish the conviction that some lives (those of the disabled, mentally retarded, or of long-term chronic diseases) are worth less than others.

In addition, these entities would know far better than politicians how the proposed bill, if approved by parliamentary vote, would undermine suicide prevention, the provision of palliative care, trust in doctors, and the pressure it would impose on vulnerable people to end their lives prematurely.

Should the parliament deny all these facts, then the very humanitarian nature of healthcare would be driven down "Via Dolorosa".

Finally, we consider the parliament too exalted to follow, obliviously, the heedless steps of other countries along that route.

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Countries which initially allowed only terminally ill adults who are mentally competent to access an assisted death have expanded eligibility to include people with arthritis, anorexia, autism, and dementia. They also added children, including babies up to one year old with Spina Bifida. Canada has eroded safeguards in just a few years, expanding from terminal illness to include chronic illness and disability. And in 2027, people with a mental illness as their only medical condition will be eligible. A person with anorexia may qualify for Medical Assistance in Dying if they refuse treatment and their death is considered 'reasonably foreseeable' owing to malnourishment. In 2022, the number of people who ended their lives by assisted suicide and euthanasia accounted for 4.1% of all deaths in Canada; a total of 13,241 people.

A 2023 poll in Canada reveals a disturbing shift in social attitudes when physician-assisted suicide or euthanasia is legalised, with more than a quarter of Canadians supporting euthanasia on the grounds of poverty. The same poll also revealed that a similar

number of people support euthanasia on the grounds of homelessness, 43% support it for mental illness, and 50% support euthanasia for disabled people.

The call is yours now to defy the unethical, immoral and detrimental act, or succumb to it.

Best regards.

Amin Kashmeery

Chairman, Global Council for Islamic Biomedical Ethics

In the Name of Allah, the Most Gracious, the Most Merciful

Fatwa: The Ruling on Suicide Assisted by Others

Praise be to Allah, Lord of the Worlds, and peace and blessings be upon our Master Muhammad, his family, and his companions.

Allah, the Almighty, created mankind and granted them rights that must not be violated or transgressed. Foremost among these rights is the right to life.

According to Islamic law, as well as other divinely revealed laws, human life is sacred and inviolable. Therefore, Islam strictly prohibits the taking of one's own life (suicide) by any means and for any reason. Allah has warned of severe punishment in the Hereafter for those who commit suicide.

Moreover, the punishment is not limited to the individual who commits suicide but extends to anyone who assists, supports, or facilitates the act. This particularly applies to medical professionals who provide or prepare medications or other means to assist in the act of suicide, leveraging their expertise and professional skills.

Similarly, those who contribute to enacting such laws, especially judges who issue rulings permitting assistance in suicide, are also considered complicit in the crime and sin.

We therefore affirm that suicide is unanimously forbidden in Islam, as human life is not owned by the individual but is a trust from Allah. Allah has forbidden the taking of life in His words: "And do not kill yourselves. Indeed, Allah is ever Merciful to you." (Quran 4:29)

The Prophet Muhammad (peace be upon him) also stated: "Whoever kills himself with something will be punished with it on the Day of Resurrection."

Thus, requesting someone else to end one's life is a grave sin and is held accountable.

As for the person who assists the suicide, whether through weapons, medication, or any other means at the request of the individual, they are considered to have committed premeditated murder and must bear full religious, legal, and social responsibility. Allah says: "And whoever kills a believer intentionally, his recompense is Hell, wherein he will abide eternally." (Quran 4:93)

This remains the case even if the perpetrator claims they were fulfilling the wishes of the individual or acting for any perceived reason.

Hence, we maintain that both suicide, whether self-inflicted or assisted, is unequivocally forbidden in Islamic law. Both the one committing the act and anyone assisting in it bear sin. Instead, individuals in distress must be supported and provided with solutions to help them overcome their hardships, not laws or assistance that end their lives. Particularly, doctors have a sacred duty to preserve life and not to take it.

Bujar Spahiu

Grand Mufti of the Republic of Albania
President of the Albanian Islamic Community