

INTRACTABLE HAEMATURIA IN PREGNANCY: CHALLENGES OF MANAGEMENT CASE REPORT AND REVIEW OF LITERATURE.

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Abstract

Background

Intractable haematuria is a life threatening and challenging urological emergency. It is more so when it occurs in pregnancy as the lives of both mother and baby are at risk. The safety in pregnancy of most agents or methods used in treatment of this condition is unknown.

Materials & methods

A 24 years old pregnant woman at 29 weeks gestation complained of total painless haematuria for days. Ultrasound scan revealed a bladder mass and a viable intrauterine gestation. She was admitted and managed with continuous saline irrigation of the bladder, and repeated blood transfusions as well as fetal monitoring. After 4 weeks, absent fetal heart tone was noticed. She went into spontaneous labour and was delivered of a fresh still born. She then had bladder irrigation with 1% alum solution. The bleeding stopped within 48 hours of treatment and she was discharged 72 hours later.

Conclusion

Intravesical alum irrigation is an effective method of treatment, its safety profile in pregnancy is unknown thus more studies in this regard are needed to prevent adverse maternal or perinatal outcomes.

Key words: *Intractable haematuria, Bladder tumour, intravesical alum irrigation.*

Introduction

Intractable haematuria remains a challenging urological emergency worldwide. This result from the fact that transfusion may fail to keep pace with the rate of blood loss. The life threatening situation that results becomes even more peculiar in pregnancy as the life of mother and baby are at risk resulting in poor maternal fetal outcomes.

Challenges of getting donors exist in a HIV endemic environment like ours not to mention the non availability of facilities for fulguration of the bleeding points.

The non availability of studies detailing the safety of most agents used in the treatment of intractable haematuria in pregnancy also compounded the problem.

We present a 24 yr old G2 P1 woman presenting with intractable haematuria. The peculiar challenges encountered in her management and review of relevant literature is highlighted.

Case report

A 24yr old G2 P1 + 0 presented at the Gynae Emergency of Federal Medical Centre, Makurdi

with a one week history of painless total haematuria associated with a freq. and urgency. She was 29weeks 6days pregnant. No history of trauma or urinary tract instrumentation. No history of childhood haematuria. Examination revealed a young woman who was not pale or febrile, PR 96/mm, BP 110/65mmHg

The SFH was 30cm, FHR 120 b/min
An assessment of haematuria in pregnancy? Cause was made

An abdominal ultrasound revealed a 6.5 x 9.4cm irregular isoechoic mass in the postero inferior wall of the bladder more to the right of the midline (fig. 1)

The kidneys exhibited no backpressure changes and no masses were noted within them. A conclusion of bladder tumour was made.

The obstetric uss revealed a singleton, viable breech baby with an EFW of 2.54kg, EGA 34weeks 6days, EDD 28/4/11

Admitting PCV was 21%,

The urine culture yielded no significant growth. The U & E, cr & LFTS were within normal limits.

She was commenced on IM Dexamethasone for fetal lung maturation and continous bladder drainage with normal saline. She had repeated episodes of clot retention and flunctuating levels of packed cell volume inspite of transfusion of fresh whole blood.

She was being worked up for an elective operative delivery but persistent haematuria leading to anaemic heart failure and challenges getting several units of blood at once precluded the surgery.

A total of eleven units of blood were transfused. She noticed absent fetal movements after four weeks on admission and went into spontaneous labour with a spontaneous vertex delivery of a fresh still birth weighing.

She was subsequently commenced on 1% alum bladder irrigation. The bleeding reduced within twenty four hours and stopped completely within 48 hours. The only side effect noted was a high grade fever (temperature 38.5 degree Celsius). A blood culture yielded no growth. The fever subsided within 24 hours. Post irrigation creatinine was within normal limits.

She was unable to provide the fund for a cystoscopy and biopsy for histological confirmation. She was discharged 72 hours after ceasation of the bleeding. PCV at discharge was 26%. A total of eleven units of blood were transfused in the course of the admission.

She defaulted follow up and has not been seen since discharge.

Discussion

Several options exist for the treatment of intractable haematuria (1)

Intravesical alum irrigation was first described in 1982 by Floyd Csir(3). It works by precipitating protein on the cell surface and superficial spaces. This leads to decreased capillary permeability, contraction of intercellular space, vasoconstriction, hardening of the capillary endothelium and a reduction in oedema, inflammation and exudates (4)

Complications of bladder irrigation with alum include pyrexia which was noted in this patient and observed by kennedy et al in two out of eight patients in their series.(5)

Aluminium is excreted by the kidneys and toxicity causes neurofibrillary degeneration in the CNS

which manifests as encephalopathy, malaise speech disorder, dementia, convulsions and vomiting (1)

We are not aware of any study on the safety of Alum irrigation in pregnancy hence the hesitation in using this option when the baby was viable.

Conclusion

Intractable haematuria in pregnancy is a rare life threatening urological and obstetric emergency. Intravesical alum irrigation is a proven effective method of treatment for intractable haematuria, but its safety profile in pregnancy is unknown. More studies are required to determine the safety of this and other methods as well as the best treatment modality in pregnancy. This will prevent adverse outcomes such as perinatal mortality seen in the case presented.

References

1. Choong, S. Walkden , M. and Kirby R (2000), The management of intractable haematuria. *BJU international* 86: 951 959, doi: 10.1046/s 1464 41 x 2
2. Kumira F, Sakamofu; Shmizu, Nakajima F, Nakamura H. transitional cell carcimoma of bladder occurring during pregnancy; report of two patients. *Nippon Hinyokika Gakkai Zasshi*, 199 Nov: 85 (11): 1683 6
3. Ostroff EB & Chenault Ow Jr. Alum irrigation for the control of massive bladder hemorrhage. *J Urol* 1982; 128: 929 30
4. Goel AK, Rao MS, Bhagwat AG, Vaidyanathan S, Goswami AK, Sen TK. Intravesical irrigation alum for the control of massive bladder hemorrhage. *J Urol* 1985; **133**: 956 7
5. Kennedy C, Snell ME, Witherow RO. Use of alum to control intractable vesical haemorrhage. *Br J Urol* 1984; **56**: 673 5



Fig 1 Ultrasonic view of the bladder mass