

NON-OBSTETRICAL VAGINAL TRAUMA: CAUSES AND COMPLICATIONS

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ABSTRACT

Non-Obstetrical vaginal trauma is a common occurrence but is under reported. It is commonly related to coital trauma but may also be a consequence of direct penetrating trauma, automobile accident and post menopausal atrophy. All these injuries may range from minor vaginal laceration to life threatening hemorrhage. The peculiar thing about these injuries is marked delay in seeking professional help as a patient perceives it as a social stigma. History may be misleading, with resistance in examination, under estimation of blood loss leading to erroneous diagnosis and hence delayed prompt treatment.

Objective; Our study intends to report the relative contribution of various causes leading to non-Obstetrical vaginal trauma with its resultant morbidity and mortality amongst patients managed in its tertiary care hospital and two private hospitals during the study period.

Material & Methods: It was a descriptive study from 1st July 2015 to 30 June 2016 at Lahore general hospital which is a teaching hospital attached to Ameer ud din medical college and post graduate medical institute. Researchers also included cases managed in two private hospitals. All cases with suspicion of sexual assault and medicolegal involvement were excluded. These patients underwent examination under anesthesia for exact anatomical location of injury, any collateral damage and primary definite surgical repair along with blood transfusion. They were advised to come for follow up six weeks later.

Results: Collectively 40 patients of non-Obstetrical vaginal trauma were managed as emergency cases, majority 34 cases (85 %) were due to coital trauma and six cases (15%) due to non-coital trauma, commonest mode of presentation was vaginal bleed with varying degree of shock 28 cases (70 %), bilateral vulval hematoma four cases (10 %), fecal incontinence from 4th degree perineal tear two cases (5%), urinary incontinence one case (2.5 %) and urinary retention one case (2.5 %). Blood transfusions were required in 37 cases ranging from 02 to 12 units of blood. Transfusion reaction developed in four cases (10.8 %), sepsis in two cases (5.4 %), acute renal failure necessitating dialysis in one case (2.7 %). One patient died of hemorrhagic shock. Only 11 cases reported for follow up visit, 06 had depression, 03 deep dyspareunia and two vaginismus. Rest were lost to follow up.

Conclusion: Our study concluded that the most common cause of non-obstetrical vaginal trauma is coital injury sustained at consummation of marriage. Although majority recovered well yet its prevention poses a great challenge to the gynecologist community.

Key words: coital injury, non-coital injury and examination under anesthesia.

INTRODUCTION

Non-Obstetrical vaginal trauma is a common occurrence yet seldom reported gynecologic emergency. It is usually associated with short and long term physical and physiological consequences. It is primarily coital in origin and may result in death where prompt diagnosis and treatment is not obtained¹. The peculiar thing about this injury is marked delay in seeking professional help as patient perceives it as a social stigma². History may be misleading, there is

usually underestimation of blood loss, resistance in examination due to pain and chance of missing the extent of injury due to large blood clot partially obscuring the injury site³. These injuries may be associated with entrance into the peritoneal cavity due to opening of pouch of Douglas, damage to urethra and anal canal particularly in patients with developmental anomalies of the lower genital tract⁴. Other causes of non-obstetrical vaginal trauma include direct penetrating trauma, fall from height, road traffic

accident, fall astride. Bull gore injury of vagina has also been reported⁵. These injuries are usually underreported and these women continue to suffer in silence till the time it become a life threatening emergency.

OBJECTIVE

Our study intends to the report the relative contribution of various causes leading to non-Obstetrical vaginal trauma with its resultant morbidity and mortality.

MATERIAL & METHODS

It was descriptive study from 1st July 2015 to 30 June 2016 at Lahore general hospital which is a tertiary care teaching hospital attached to Ameer ud din medical collage and post graduate medical institute. Researchers also included cases managed in two private hospitals Jamila Firidi Hospital Johor Town and Niazi hospital samanabad. All cases with suspicion of sexual assault and medicoligal involvement were excluded. These patients under went examination under anesthesia for exact anatomical location of injury, for any collateral damage and primary definite surgical repair along with

blood transfusion. They were advised to come for follow up six weeks later.

RESULTS

Results are shown in tabulated Form. Table 1 Shows scio-Demographic Characteristics. Collectively 40 patients of non-Obstetrical vaginal trauma were managed as emergency cases majority 34 cases (85 %) were due to coital trauma and six cases (15%) due to non-coital trauma table 02, commonest mode of presentation was vaginal bleed with warring degree of shock 28 cases (70 %), bilateral valval hematoma four cases (10 %), fecal in continence from 4th degree pernea tear two cases (05%), urinary incontinence one case (2.5 %) and urinary retention one case (2.5 %) table 03. Blood transfusion were required in 37 causes ranging from 02 to 12 units of blood. Transfusion reaction developed in four cases (10.8 %), sepces in two cases (5.4 %), acute renal failure necessitating dialysis in one case (2.7 %)table 04. One patient died of hemorrhagic shocked. Only 11 cases reported for follow up visit, 06 had depression, 03 deep dysparenia and two vaginismus. Rest were lost two follow up table 05.

Table 1: Scio-Demographic Characteristics.(n=40)

Characteristics		Frequency	Percentage
Age	15-25	25	62.5
	26-35	10	25
	36-45	3	7.5
	46-70	2	5
Marital status	Married	40	100
	unmarried	00	
Time since marriage	<1day	28	70
	1-7days	05	12.5
	02-50yrs	07	17.5
Social status	Low	30	75
	Middle	8	20
	upper	2	5
Education	primary	30	75
	Secondary	8	20
	Tertiary	2	5
Need for emergency surgical treatment	Yes	37	92.5
	No	03	7.5
Duration of hospital stay	24hrs-72hrs	05	13.51
	> 72hrs	32	86.48
Need for blood & blood products	Yes	35	87.5
	No	02	12.5

Table 2: Causes of genital tract trauma (n=40)

Causes		Frequency	Percentage
Coitus	Vaginal	31	77.5
	Anal	02	5
	Urethral	01	2.5
Non coital	Road traffic accidents	02	5
	Fall astride	01	2.5
	Fall from stairs	01	2.5
	Fall on bushes	01	2.5
	Direct trauma	01	2.5

Table 3: Main clinical features (n=40)

Clinical features		Frequency	Percentage
Vaginal wall lacerations alone		02	5.0
Vaginal & paraurethral lacerations		01	2.5
Vaginal lacerations with opening of pouch of doughlas		1	2.5
Vaginal laceration with shock	Stage 1	08	20
	Stage 2	20	50
Bilateral vulval hematoma		4	10
Fecal incontinence from 4rth degree Perineal tear from vaginal & anal intercourse		2	5
Urinary incontinence due to Dilated urethra & internal urethral sphincter incompetence from urethral intercourse		1	2.5
Urine retention ,vaginal bleeding & undisplaced ischium fracture		1	2.5

Table 4: Complications during hospital stay (n=37)

Complications	Frequency	Percentage
Blood transfusion reactions	4	10.81
Sepsis	2	5.40
ARF	1	2.70
Death	1	2.70

Table 5: Complications reported at follow up*

Complications reported	Number
Depression	6
Deep dyspareunia	3
Vaginismus	2
*Rest were lost to follow up	

DISCUSSION

The most common cause of non obstetrical vaginal trauma is coital trauma sustained at 1st intercourse following marriage. Bleeding from post coital vaginal lacerations can be perfuse and endanger life⁶. One of our patient (Bride) expired inspite of primary definite surgical repair of vaginal lacerations along with massive blood transfusion. she was already in a state of severe hemorrhagic shock due to late arrival in the hospital and continued vaginal bleeding following coital trauma. Out of 133 cases reported by diddle 02 patients bled to death and 22 was in hemorrhagic shock ⁷ Wilson and Swartz

reported 05 cases with hypovoleimic shock amongst 33 such cases.⁸

Associated non genital injuries, rectovaginal fistula and vasico-vaginal fistula following the coital trauma has also been reported as not bening an uncommon findings.^{9,10}. Two of the cases in our study presented with 4th degree perennial tear and successfully repaired. One case with urinary incontinence due to internal urethral sphincter incompetence and dilated urethra following urethral intercourse were refer to the urologist.

Blood transfusion was required in almost all patients. Need for blood transfusion exposes these patients to the risk of transfusion reaction and transfusion transmitted diseases, four of our patients developed transfusion reaction. During hospital stay two patient developed complications in the form of sepsis and acute renal failure but recovered well.

These complications and mortality following coital trauma are preventable by counseling and sex education¹¹, timely seeking emergency treatment and psychological support¹².

CONCLUSION

Our study concluded that the most common cause of non-obstetrical vaginal trauma is coital injury sustained at consumation of marriage. Although majority recovered well yet its prevention poses a great challenge

to the gynecologist community in terms of sex education related to marital relation and its long term psychological sequelae also need to be looked into especially in young female with an initial traumatizing sexual experience.

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