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THE DESIGN OF LACERATIONS OF PERINEUM DURING VAGINAL DELIVERY

[1]Dr Kawish shafqat, [2]Dr Rabia Murad, [3]Dr Kinza Anwar
Jinnah Hospital Lahore.

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Abstract:

Objective: *The purpose of this research work is to conclude the design of the lacerations of perineum at the time of delivery through vagina in a specialized health care center.*

Methodology: *This study is an elaborate research work conducted in maternity department of Jinnah Hospital Lahore. The duration of the study was from September 2016 to August 2017. Females having a single child pregnancy either primi-gravida or multi-gravida in labor were the part of this research work. Every patient gave his willing to participate in the research work. Females having twins were not the part of this research work. Age of the patient, number of the child, degree of laceration, delivery method, and weight of the baby at the time of birth, dangerous aspects & problems were recorded.*

Results: *There were total two thousand five hundred and sixty-three deliveries; two hundred and fifty-six patients found some amount of lacerations to perineum providing a rate of about ten percent. Out of 256, one hundred selected for this research work in which thirty-seven were multiparous & sixty-three were prim parous. A high occurrence of 1st & 2nd degree laceration was recorded & occurrence was very high when the delivery from vagina carried out lacking episiotomy & the weight of fetal was greater than four kilograms. The period of labor, support to perineum and availability of edema of perineum were the significant risk features.*

Conclusion: *Lacerations of perineum at delivery time are very frequent as described by this case study. Deficiency in care of perineum, low economic conditions & no experience is some of the contributing elements in the increase of the perineal tears.*

Key Words: *Perineum, laceration, vagina, delivery, risk, case, multiparous.*

Corresponding author:
Dr. Kawish shafqat,
Jinnah Hospital Lahore.

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INTRODUCTION:

The trauma of genital tract is very common morbidity after the delivery from vagina [1]. Perineal morbidity for long duration is linked with collapse to identify or to rectify the tears of perineum sufficiently. The trauma at the anal portion leads to many mental, social and physical issues [2]. There are different types of the occurrences of damage to the muscle of anal sphincter from the birth of child with an occurrence of eleven percent of postpartum females [3]. Both mother and inborn child are blamed for the creation of the risk features. Some of the maternal reasons are null parity, mother of small age, genital hiatus with small size & shortness in the perineal body [4]. Child born with an episiotomy or delivery through caesarean may be one reason [5]. Mackenzie [6] in his research work concluded that thirty to thirty-five percent of females are to suffer with incontinence of the anal area, stool urgency, dyspareunia & extreme pain in the perineum once they maintain a 3rd & 4th degree damage to the anal sphincter & this pain is more difficult than the pain at the time of childbirth [7].

Concentration should be given to the improvement of the maternity practices to reduce the outcome of the damages and lacerations [8]. Current proofs connect the sphincter lacerations with the incontinence of fecal, which places a real negative impression of the life of the patient [9]. The occurrence of the worse bowel is ten times higher in the females with 4th degree tears as compared to the 3rd degree tears [10]. The aim of this research work was to view the incidence of perineal lacerations at the time of normal delivery through vagina in a hospital which was handling a large amount of the patients from whole inner areas of Punjab province. This study was the 1st one in our areas in which the main focus is on perineal lacerations & further data can be gathered through this research work how to decrease this damage in females.

METHODOLOGY:

This elaborated study carried out in maternity department of hospital of Jinnah Hospital Lahore. The duration of the study was from September 2016 to August 2017. One hundred patients were the participants of this research work. Information of the research work was provided to members of the study and they also gave their willing for the conduction of the research work. Inclusion standards were females with single child near to give birth, prim gravida & multigravida. Females having twins were not the part of this work. Most of the patients were un-booked in this study but some patients had regular care of antenatal. The record about the complete history of the patients maintained for future use. Complete basic and related interrogation carried out. A standard protocol was in use for the management of the labor. When there was requirement, deliveries conducted with the help of episiotomies. Once the 3rd stage of labor was at end, the examination of vagina, vulva & cervix was carried out for lacerations and management carried out according to the requirement.

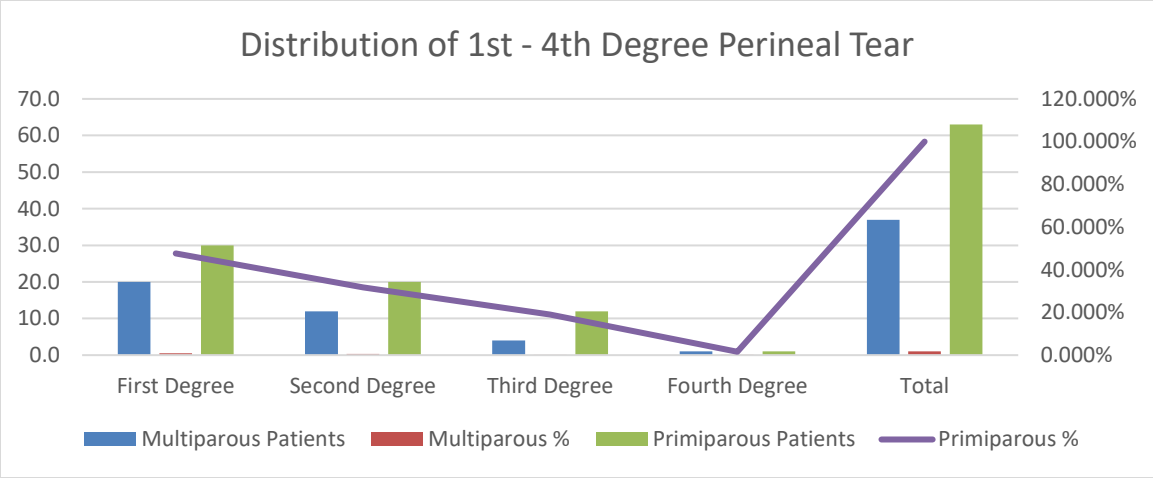
The analysis of the collected information carried out with the help of SPSS software version eleven. The rates and frequencies were maintained in percentages.

RESULTS:

Out of hundred patients, there were sixty-three prim parous patients having age from twenty to thirty years & thirty-seven multiparous patients having age from thirty years to forty-four years. A large quantity of the patients was un-booked (ninety-three) & only seven percent patients fall in the category of booked. The rate of 1st & 2nd degree was more than forty-seven percent in prim parous & fifty-four percent in multiparous females. The rate of 3rd degree was high in prim parous (nineteen percent) but only ten percent in multiparous females as described in Table-1.

Table-I: Frequency and Distribution of First-Fourth Degree Perineal Tears in Prim Parous and Multiparous Women (n=100).

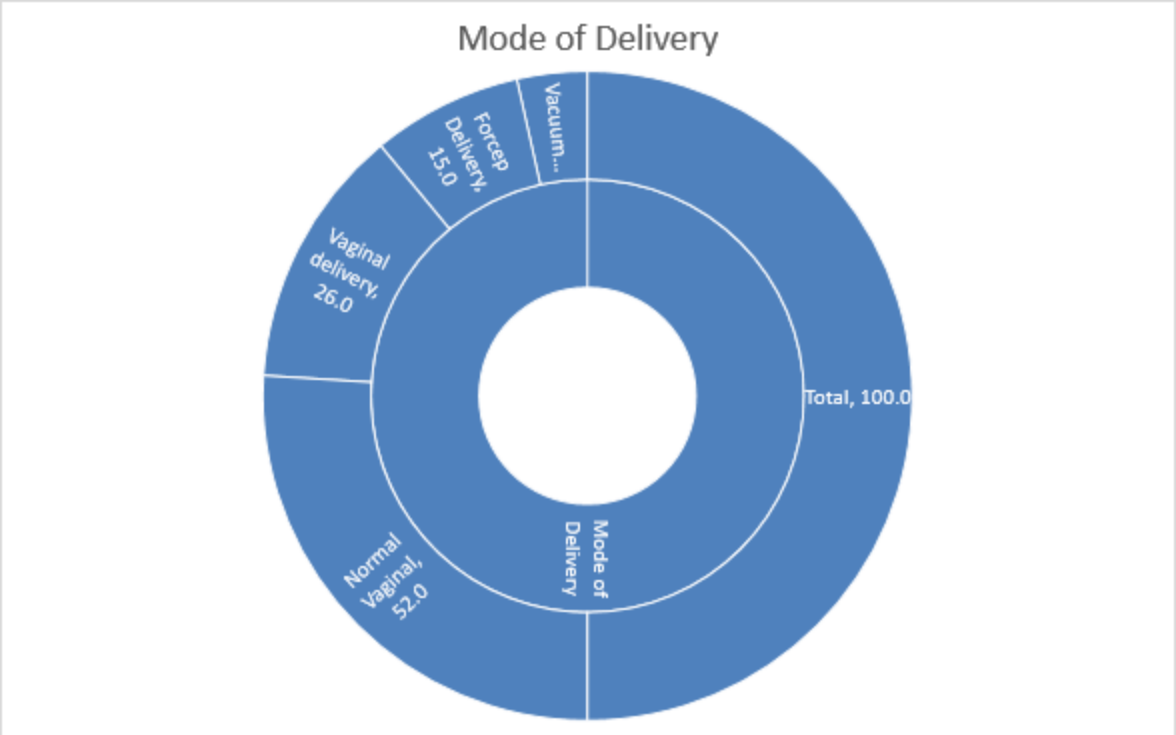
Degree of Perineal Tear	Multiparous Patients		Prim parous Patients	
	No	%	No	%
First Degree	20.0	54.050%	30.0	47.610%
Second Degree	12.0	32.430%	20.0	31.740%
Third Degree	4.0	10.810%	12.0	19.040%
Fourth Degree	1.0	2.700%	1.0	1.580%
Total	37.0	100.0%	63.0	100.0%



The largest rate of perineal laceration about fifty-two percent was available in patients group in which delivery through vagina with no episiotomy carried out as shown in Table-2.

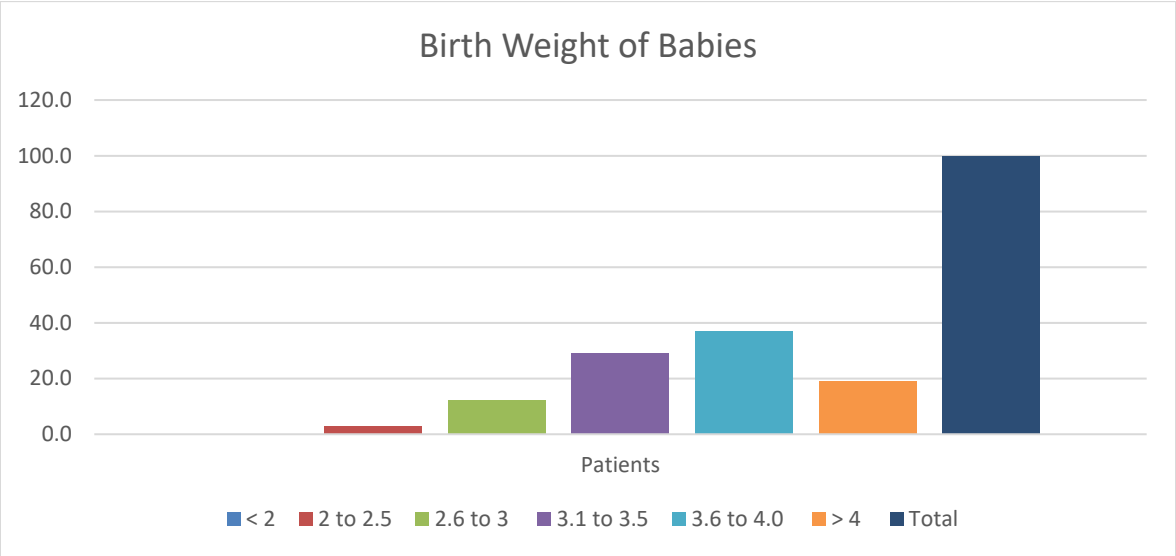
Table-II: Mode of Delivery (n=100).

Delivery		**Patients**	**Percentage**
Mode of Delivery	Normal Vaginal	52.0	52.00%
	Delivery		
	Vaginal delivery	26.0	26.00%
	with Episiotomy		
	Force Delivery	15.0	15.00%
	Vacuum Extraction	7.0	7.00%
	Total	100.0	100.00%



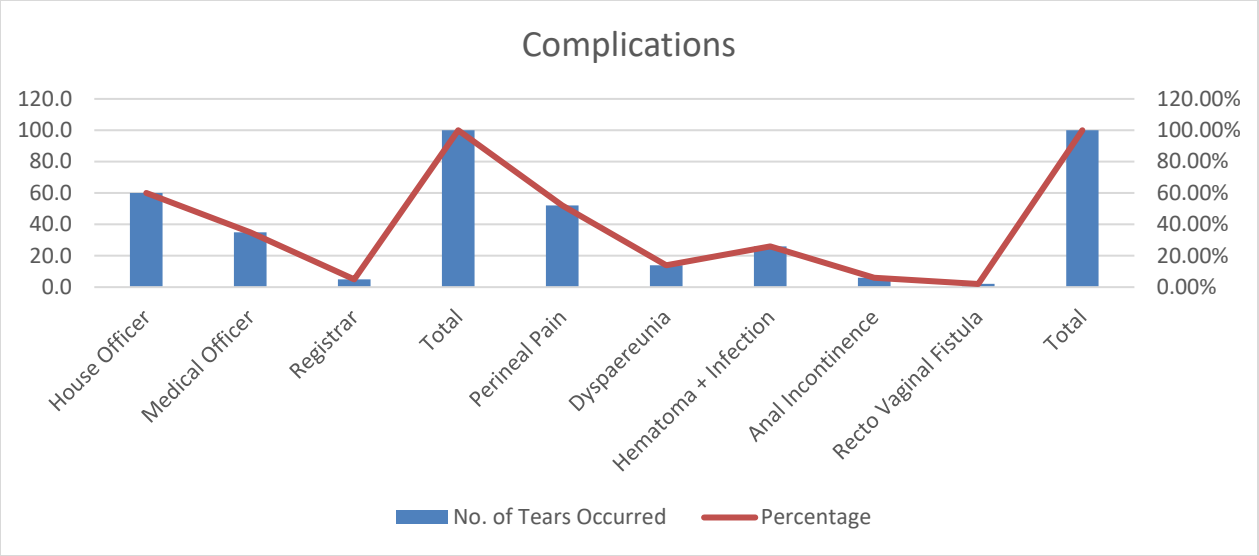
The incidence of perineal laceration was available to be twenty-nine percent when the weight of the new baby was from three to 3.5 kilogram, thirty-seven percent when weight was greater than 3.5 kilogram & nineteen percent when weight was four kilogram or greater than this as mentioned in Table-3.

Table-III: Birth Weight of Baby and Perineal Tears (n=100).		
Baby Weight in kg (Birth)	Patients	Percentage
< 2	0.0	0.00%
2 to 2.5	3.0	3.00%
2.6 to 3	12.0	12.00%
3.1 to 3.5	29.0	29.00%
3.6 to 4.0	37.0	37.00%
> 4	19.0	19.00%
Total	100.0	100.00%



About 60% patients complained about the pain of perineal area, hematoma occurred in fifty-two percent & fourteen percent patients developed dyspareunia as shown in Table-4.

Table-IV: Complications and Delivery Conducted by (n=100).			
Parameters		No. of Tears Occurred	Percentage
Birth Attendant	House Officer	60.0	60.00%
	Medical Officer	35.0	35.00%
	Registrar	5.0	5.00%
	Total	100.0	100.00%
Complications	Perineal Pain	52.0	52.00%
	Dyspareunia	14.0	14.00%
	Hematoma + Infection	26.0	26.00%
	Anal Incontinence	6.0	6.00%
	Recto Vaginal Fistula	2.0	2.00%
	Total	100.0	100.00%



DISCUSSION:

The damage of anal sphincter at the time of child birth linked with the morbidity together with perineal area pain, dyspareunia & incontinence of anal. Incontinence of anal has an impact on the mental & physical health of the females [11]. The incidences of the perineal lacerations are not present in many different areas of the world, but it is very frequent in the populations of our society with a high rate of about ten percent. Some research works of Europe & America concluded the rate of occurrence as twenty-five percent and sixteen percent respectively [12, 13]. Some data is available which confirms that nulliparous females have high danger for lacerations in contrast with multiparous females [14] & this is very much similar to our results. Leeuw JW & his colleagues [15] in a research work declared Medio-lateral episiotomy is very secure and protective against the problems to anal sphincter at the time of delivery.

The deliveries with the help of vacuum gave low amounts of lacerations at the time of delivery [16], & it links with the result of this research work with seven percent lacerations with vacuum delivery & fifteen percent in the deliveries with the help of forceps. Different research works displayed that weight of baby at the time of birth with more than four kilograms to be an enhanced risk feature for dangerous injuries at the time of birth [17]. Zetterstrom [18] concluded that when the baby weight at the time of birth was more than four kilograms, it was serious risk feature for the occurrence of damage to the anal sphincter. In this research work, the most of the lacerations were available to be subsequent in seventy-seven percent in contrast with fourteen percent of front tears. Nager [4] in his research work stated that anterior tears are not linked with important bad results but midline posterior lacerations created lacerations of the sphincter. In our societies, most of the females are suffering from many such complications but they feel shy to describe the matter & low level of knowledge about such issues is very vital restriction in the detection & handling of these issues.

CONCLUSION:

The injuries of anal sphincter & perineal lacerations are very frequent in our communities. Poverty, uneducated masses, bad maternal care and poor facilities of transport are the main issues waiting for rectification. There is a requirement of awareness with education for doctors at junior stage as well as TBAs (Traditional Birth Attendants) and other providers of the health care. The continue education and awareness will help in the recognition of the serious complications at the initial stage and it will also prevent the extreme tears during the normal delivery through vagina.

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