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Original research article

A study of pelvic fractures in child: Bearing aged women

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Abstract

Fractures of the pelvis are a dangerous medical condition. When a woman of reproductive age sustains a pelvic fracture, she may question if she will be able to have children and, if so, what type of childbirth alternatives will be open to her if she does.

Keywords: Pelvic, fracture, features, women, childbearing, age

Introduction

A broken pelvis is a significant injury that can have long-term repercussions not just for one's ability to function but also for their ability to make money. Because of the related problems, there is a chance that the genitourinary and reproductive systems will be affected both temporarily and permanently [1, 2, 11]. In the case of women of reproductive age, pelvic trauma has the potential to have far-reaching repercussions. These ladies are concerned, as is to be expected, about the awkwardness that comes along with sexual experiences as well as the question of whether or not they will be able to have children. They are worried that having a pelvic fracture may limit the types of delivery alternatives that are open to them. In addition, there is an expanding body of literature that reveals an increased incidence of posttraumatic stress disorder as well as a deterioration in functional outcomes among female trauma patients [3, 4, 8, 16]. The phrase "pelvic ring disruption" refers to a spectrum of injuries, some of which may be treated without the need for surgery, while others are regarded to be life-threatening and must undergo surgical stabilisation in order to be treated properly. There are also a large number of various methods for stabilisation, ranging from those that are minimally invasive and percutaneous [5] to those that entail fixation across the pubic symphysis [5, 6, 7, 18] and/or the sacroiliac joints [5, 9, 10, 18]. In addition, after sustaining a pelvic fracture, women may feel negative thoughts about themselves, which may manifest in poorer evaluations of functional outcome [2, 11, 12, 13, 14, 17]. This phenomenon may contribute to lower ratings of the functional outcome. It is a frequent misperception that women who have had pelvic fractures are unable to give birth vaginally [3, 6, 10, 15, 16, 18]. This myth is so widespread that it is even prevalent among obstetricians. When an obstetrician finds that a woman has had a pelvic fracture in the past, there is a good chance that she will not even be given the opportunity to have a trial labour [2]. This is because there is a good chance that the woman may experience complications during delivery. Nevertheless, the non-operative treatment of these fractures or the surgical treatment with iliac wing fixation, an external fixator, and/or ramus screws should not have an effect on the proportions of the pelvis or the mobility of the symphysis and the sacroiliac joints in the majority of instances. This is because these treatments include the use of either an external fixator or ramus screws. If there is fixation across the pubic symphysis and maybe the sacroiliac joints, there may be cause for worry. This is because the pubic symphysis and the sacroiliac joints are both located in the pelvis. This is due to the fact that throughout the whole labour and delivery process, it is essential for the symphysis and sacroiliac joints to maintain their full range of motion. However, it is not totally clear if pelvic fractures or the therapies for them actually interfere with the process of giving birth.

Aims and Objectives

This research was carried out in the Orthopaedics Department. The research was carried out between October 2018 and October 2020.

Inclusion criteria

Females in child bearing age group.

Exclusion criteria

- Menopause.
- Pre-Menopause.
- Before menarche.

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- Pelvic congenital anomalies.

We used the Burgess *et al*. classification to categories fractures. This classification is sometimes referred to in the scientific literature as the Young-Burgess classification. We went through their medical history and looked at how they were treated for their pelvic fracture. If the patient underwent surgery, specific information on the procedure and the kind of fixation employed was documented. This information included the use of unilateral or bilateral sacroiliac screws, iliac wing fixation, rami screws (either unilateral or bilateral), transsymphyseal plating, and/or the use of an external fixator.

Results

Table 1: Mean age of the patients

Number	Mean age	Std. deviation
37	35.49 years	3.36 years

Table 2: Surgeries carried out

Anterior pubic plating	03
Ramus screws	
Unilateral	18
Bilateral	01
Sacro-iliac screw	
Ubilateral	01
Bilateral	07
Iliac wing fixation	02

Table 3: SF 12 scores and surgical fixation

	Surgery	No surgery	Sig
Physical	3.76	6.45	Not sig
Mental	5.14	7.16	Not sig

Table 4: SF 12 scores in women who had children after pelvic fracture

Children	No Children	Sig
81%	19%	Sig

Discussion

It is general knowledge that fractures to the pelvis might impede the body's ability to operate normally in the genitourinary system. The presence of urinary symptoms was more prevalent, particularly among female patients who had prolonged pelvic fracture displacement [2]. Throughout the course of our investigation, we analysed the fracture patterns, however we did not record any instances of residual displacement. We made the startling discovery that almost half of the women who had pelvic fractures (49%) also had one or more genitourinary disorders. This finding was in no way associated to the pattern or stability of the fractures in any manner. There is just one publication in the collection of literature that focuses specifically on female genitourinary issues that occur after pelvic trauma. This suggests that the problem area is not being adequately handled [2]. Research conducted by Copeland and colleagues indicated that out of a total of 57 urine complaints observed in 26 people, women had a considerably greater likelihood of experiencing numerous urinary complaints. In her research, the total rate of urinary complaints was 21%, which was a considerable increase from the rate in the group that served as a control [2]. It is probable that subclinical injuries to the soft tissues or lengthy urine catheterization were the elements that contributed [2]. There were relatively few genitourinary injuries that were reported in that group. We did not evaluate the amount of time that our patients were required to use urinary catheters, nor did we evaluate the associated soft tissue damage. In general, one would not expect to see an incidence of pee complaints at 49% in the absence of direct genitourinary injuries such as a burst bladder or a lacerated vaginal canal; despite this, it is probable that this is not appropriately investigated or inquired about during the post-injury follow-up. An increasing amount of attention is being paid to the effect that traumatic events have on a person's capacity to function normally. In this procedure, the use of outcome measures that have been validated is required. A research was conducted on female patients who had major lower extremity damage as well as female patients who had pelvic fractures, and the findings were compared to age-standardized norms. The SF36 was used in the study. The patients' ratings were much lower all around, and this was the case regardless of the dimension [11]. During the course of our research, we looked at the possibility of finding correlations between the kind of fracture, the therapy, and any changes in the results. It appeared that the total scores were identical to one another in every aspect that we could discern. On the other side, it was shown that women who had children after

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sustaining a pelvic fracture had higher overall SF12 scores than those who did not have children after the injury. This outcome completely defied everyone's expectations, especially when one considers the fact that women have a higher chance of developing posttraumatic stress disorder and that postpartum depression might occur [4, 8, 16]. On average, it took the patients six years from the time of the traumatic occurrence until they were able to fill out all of the necessary paperwork. It is probable that the longer period of time that has gone since the traumatic occurrence, as well as the presence of a kid, both contributed to the improved overall functional outcome score.

Conclusion

In general, there are not a lot of facts and a wide range of different viewpoints that have been published on giving delivery following pelvic fractures. However, it is feasible to deliver a baby vaginally after a pelvic fracture, even in patients who have been treated with surgical stabilisation that spares the pubic symphysis. Our findings imply that the rate of caesarean section is more than double the usual norms.

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