

The Results of Surgical Treatment of Patients with Various Types of Traumatic Injuries of the Coccyx.

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SUMMARY

This article analyzes the results of surgical treatment of 48 patients with post-traumatic coccygodynia. All these patients were operated on in the department of orthopedics of the Khorezm Regional Multidisciplinary Center №1. Of all the patients, 39 (81, 25%) were females, 9 were males (18.75%). The patients underwent surgical treatment in the form of coccyx removal using the developed access and coccyx removal method. To remove the coccyx, the skin incision, in contrast to the generally accepted one, was made 4-5 cm above the anus and moving away from the intergluteal line to the right by 1.5-2 cm i.e. on the projection of the richly vascularized fascia thoracolumbalis. After removing the coccyx in parts, i.e. according to the type of "disassembling a coin column", the anally-coccygeal ligament, previously taken on the holders, was sutured to the sacrum, thus preventing the failure of the external sphincter of the rectum. A good result was observed in 42 (87.5%), satisfactory in 5 (10, 4%), and unsatisfactory in 1 (2%) patient.

KEY WORDS: coccygodynia, coccyx, method of clinic

Coccygodynia (Latin coccyx + Greek dyne pain; synonym coccygeal pain) is a disease manifested by paroxysmal or persistent pain in the sacrococcygeal region. Often young and middle-aged women suffer from this disease. The pain is sometimes excruciating, depriving patients of peace and full life [11, 12]. In some women, the disease develops after complicated labor [2, 4, 5]. In most patients, the cause of the disease cannot be found [5, 6, 7]. There are few publications on this topic. When studying the literature, it turned out that over the past decade there has been a sharp decline in coccygodynia research [9].

To date, the problems of diagnosis and treatment of coccygodynia are still not fully resolved. The success of treatment depends on the correctly identified cause of the disease and complex therapy [1, 7].

Some authors propose an operative method for removing the coccyx, while warning that this method is fraught with a number of complications [10].

After removal of the coccyx, infection of the surgical wound is a fairly common complication. In order to prevent the development of osteomyelitis after resection of the coccyx, it is recommended to close the stump of the sacrum with the periosteal periosteum [7].

To replace volumetric tissue defects Smakaev R. U suggested using an allograft, which has good frame properties and modeling, has a local hemostatic effect [3].

To close the residual cavity after removal of the coccyx, the author offers a "P" -shaped fascial-ligamentous flap plasty [1].

Thus, the problem of diagnosis and, mainly, surgical treatment of coccygodynia remains unresolved.

PURPOSE OF THE RESEARCH - To improve the results of surgical treatment of patients with post-traumatic coccygodynia by introducing the developed access and methods for removing the coccyx

MATERIALS AND METHODS.

This scientific work is based on the study of 48 patients with post-traumatic coccygodynia who were treated promptly in the department of orthopedics, Khorezm Regional Multidisciplinary Center No. 1 for 2016-2019. Our studies are consistent with literature data, according to which, in most cases, women suffer from coccygodynia. Among the patients, 39 (81.25%) were females and 9 (18.75%) males. Basically, the contingent of female patients in the most working age. In anamnesis, almost all patients noted trauma to the sacrococcygeal region. Of all 48 patients, 36 (75%) noted a fall on the coccyx area during the last 6 months. Their pain resumed 2-3 months after the injury. 10 patients noted a blow to the sacrococcygeal region. 1 man in history denied injury or fall, although the x-ray showed a deformation of the coccyx 100-110 gr. The second man had a history of chronic trauma (the patient sat for 6-8 hours a day).

The number of patients aged 16 to 20 years was 20 (women 18, men 2), from 20 to 30 years old 21 (women 17, men 4), over 30 years old 7 people (women 4 men 3). In the X-ray picture in 9 male patients, the coccyx deformity at different angles prevailed. Normally, the sacrococcygeal angle is 110 degrees.

All 39 female patients with a history of coccygodynia noted the presence of trauma, difficult labor, blow or fall into the coccyx area.

A common clinical symptom for all patients was a varying degree of pain in the coccyx area on palpation, which was aggravated by rectal digital examination.

Also, rectal digital examination reveals varying degrees of spasm and soreness of the pelvic floor muscles, the degree of displacement of bone fragments of the tailbone, dislocation of the tailbone.

Clinically, in all examined patients with coccygodynia, we investigated the intensity of pain in the coccyx and conducted a digital examination through the rectum to determine the mobility and deformity of the coccyx. X-ray of the coccyx in the anteroposterior direction is of little informative, as a result of which we used lateral projections of radiographs to measure the sacrococcygeal angle.

Before the operation, all 48 patients underwent conservative treatment in the form of drug therapy (taking NSAIDs), the use of physiotherapeutic procedures, paracoccygeal blockade with 0.5% novocaine and hydrocortisone. However, there was no effect of conservative treatment, or the pain stopped for a certain time. In the future, all patients underwent surgical treatment using a new approach and a technique for removing the coccyx.

The patients underwent surgical treatment according to the following technique: To remove the coccyx, the skin incision, in contrast to the conventional one, was made 4-5 cm above the anus and moving away from the intergluteal line to the right by 1.5-2 cm, i.e. on the projection of the richly vascularized fascia thoracolumbalis. After a layer-by-layer dissection of soft tissues, the coccyx was skeletonized, then the coccyx was removed in parts, i.e. by the type of "disassembling a coin column". The ano-coccygeal ligament, taken in advance on the holders, was sutured to the sacrum after removal of the coccyx, thus preventing the failure of the external sphincter of the rectum. The wound was sutured in layers, leaving the rubber graduate. After the operation, the patients used a rubber circle for sitting for 1-1.5 months. The results of surgical treatment of patients are shown in Table 1.

Table 1.
Results of surgical treatment of patients with coccygodynia.

Treatment results	Women	Men	Total number	In percents
Good	34	8	42	87,5%
Satisfactory	5	0	5	10,4%
Unsatisfactory	0	1	1	2%
Total	39	9	48	100%

Good result - pain in the coccyx area is absent when sitting and walking, external palpation of the coccyx area is painless.

Satisfactory - pain occurs when sitting in an hour or more. There are no pains when walking. Palpation of the coccyx area is slightly painful. Patients report a decrease in pain after conservative treatment. External palpation of the coccyx is painless.

There was 1 patient with an unsatisfactory result of surgical treatment. Pain in the coccyx area reappeared after 2 weeks. It should be noted that the patient's pain intensity decreased after the operation.

None of the operated patients had a complication in the form of incompetence of the external sphincter of the rectum..

CONCLUSIONS:

1. Our observations correspond with the literature data where coccygodynia, mainly women of the most able-bodied middle age, suffer.
2. The main factor for the development of pain in the coccyx is trauma to the sacrococcygeal region.
3. An effective method of treating post-traumatic coccygodynia, with the ineffectiveness of conservative treatment, is an operative one.
4. Removal of the coccyx according to the proposed method promotes the primary healing of the postoperative wound and prevents a possible complication such as failure of the rectal sphincter

REFERENCES

- [1] Muradyan V.Yu. Treatment of tailbone injuries and their consequences in children // Author. dis. Cand. honey. Sciences - Rostov on Don, 2000. -- P. 19.
- [2] Samitov O.Sh., Valeev E.K., Samitov E.O. Treatment of patients with post-traumatic coccygodynia // Trauma of the spine and spinal cord: Sat. thesis.- St. Petersburg., 2002.- №2. - p. 214.
- [3] Smakaev R.U., Evdokimov E.V., Petrov V.V., Mukhin A.G. Some aspects of the pathogenesis of pain in post-traumatic coccygodynia // Collection of scientific articles of the Republican Clinical Hospital. G.G. Kuvatova. -Ufa. 1995. -- p. 96-97
- [4] Sulim N.I., Kashin S.M. Features of the course and treatment of coccygodynia // Manual therapy. -2002. -№1. - p. 42-49.

- [5] Sushko V., Digtyar V.A., Mokhov O.I., Kaminska M.O. Reconstructivelyvidnovlyuvalnoylukuvannya in traumatic podkodzhennykuprika in children // Trauma. - 2004. –T. 5. - p. 450-452.
- [6] Tatyanchenko V.K. Features of diagnosis and treatment of neurodystrophiccoccygodynia: // Abstract of the thesis. dis. Cand. Honey. sciences. Rostov-on-Don, 2002 .-- P. 19.
- [7] Khidiyatov I.I., Kulyapin A.V., Gerasimov M.V., Valieva E.K. Koktsigodynia // Medical Bulletin of Bashkortostan, 2013. - №4. - p. 83-89.
- [8] Shevchuk A.V. Pathogenetic substantiation of surgical treatment of degenerative-dystrophic lesions of the sacrococcygeal joint // Abstract of the thesis. dis. Cand. honey. sciences. -Kiev, 2005 .-- p. 19.
- [9] Shevchuk A.V. Hyurgic treatment for coccygodynia // Ukr. honey. zhurn. - 2003. - No. 3. - p. 135-137.
- [10] Capar B., Akpınar N., Kutluay E., Mujde S., Turan A. Coccygectomy in patient with coccydynia // Actaorthopeda et traumatologicaturcia, 2007. -Vol. 41, No.4. - pp. 227-280.
- [11] Demircay E., Kabatas S., Cansevar T., Yılmaz C., Tuncay C., Altınors N. Radiofreguencythermocoagulation of ganglion impar in the manangement of coccydynia preliminary results // Turkish neurosurgery. 2010. -Vol 20. No. 3. - p. 328-333.
- [12] Wray C. C., Eason S., Hoskinson J. Coccydynia. Aetiology and treatment // The journal of bone and joint surgery, 1991. - Vol.73-B, No. 2. - p. 335-338.