Scholars Journal of Medical Case Reports
Abbreviated Key Title: Sch J Med Case Rep
ISSN 2347-9507 (Print) | ISSN 2347-6559 (Online)
Journal homepage: https://saspublishers.com

OPEN ACCESS

Pediatric Surgery

Results of Surgical Treatment of the Simple Umbilical Hernia at the Service of Pediatrically Surgery University Center Hospitalize Aristide Le Dantec Dakar Senegal

Sidibé, S[1*], Coulibaly, T. H. M[2], Dramé, A[2], Ndour, O[1], Ngom, G[1]

[1]Service of Surgery Pediatrically Surgery University Center Hospitalize Aristide Le Dantec Dakar, Senegal
[2]Departement of Anesthesia and Resuscitatation of Dakar, Sénégal

DOI: 10.36347/sjmcr.2022.v10i10.004 | **Received:** 29.07.2022 | **Accepted:** 01.09.2022 | **Published:** 07.10.2022

***Corresponding author:** Sidibé, S
Service of Surgery Pediatrically Surgery University Center Hospitalize Aristide Le Dantec Dakar, Senegal

Abstract **Original Research Article**

The authors report on their experiences in the surgical treatment of simple umbilical hernia in African children and a focus on pathology in resource-limited settings. However, this pathology pose a real aesthetic problem especially in young girls but surgery is the salvating treatment with good results.

Keywords: Umbilical hernia; plastic surgery.

INTRODUCTION

Umbilical hernia is the spontaneous exteriorization, temporally or permanent of a viscera at the level of umbilical. It is the fact of an incomplete closing of umbilical Ring [7]. It's a bad congenital formation very current in pediatrically practice particularly in Africa [6, 8]. We can estimate it's prevalence all the combined pediatrically populations between 30 and 40% at the birth, 15 and 30% at the age of 2 years old [1]. It will lowen down 10% between 3 and 5 years old [1]. It is considered benign in occident contrary to Africa where complications are described by the authors. The goal of our study was to described the following operatories observed after a treatment of simple umbilical hernia and to compare them to the literature data.

METHODS

We have done a prospective study of descriptive type and analytics about a time of 12 months from March 2012 to February 2013 at service of pediatrical sugary of hospital Artiste Dantec.

We included all children under the age of 16 with simple umbilical hernia operated in the pediatric surgery department. The Figures 1,2 show preoperative and postoperative images of our patients. Ten we have operated 91 patients for a simple umbilical hernia. The gathering ofdata has been done on an inquiry paper prewrite on which the different parameters were registered. Our sample was composed of 68 boys (63, 7%) and 33 girls (36, 3%) with a ratio sex of 1.75. The middleage was 15 years. We have subdivided our sample according to 3 groups of age (less than a year, 1 to 5 years and more than 5 years)[2], according to the first ways for the diameter of collar and for the duration of intervention. We have reported the global results and have compared the different groups by using the statistics tests.

RESULTS

The ages, diameter of collar the way at first don't intervein in the coming of complication. But the time of intervention is more than 360 minutes which seems to augmentation the number of complications.

We have noted 3 types of complications such as the granuloma (2 cases) the recidive (6 cases) and the scars hypertrophic (5 cases).

The majority of complications were observed in:

- The age group of 1 to 5 years (6 cases),
- The under umbilical tract (8 cases),
- Wide umbilical hernia with a neck diameter greater than 1.5 cm (4 cases),
- And when the duration of intervention was greater than or equal to 30 minutes (8 cases).

We had no infectious complications, hemorrhagic, or hematoma, the Mortality was zero in our study.

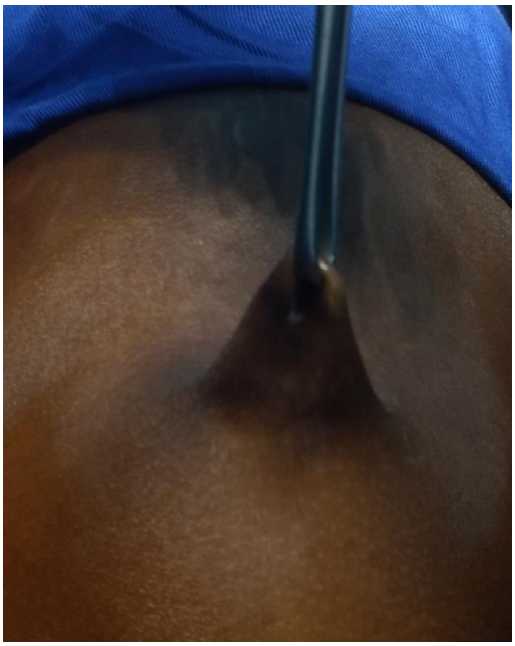

Fig 1: Image pré-opératoire in HO

Fig 2: Image per-opératoire HO

DISCUSSION

In literature complications after a treatment of umbilical hernia vary from 0 to 23% [2, 4, 9]. The frequency in our study is 11%. The frequency of complications reported by Cissoko [3] in Senegal with 7,1% and Diarra [4] in Mali with 6,5% is comparable to that found in our study. The highest frequencies have been noted in the thind in occident by Keshgtar *et al*., [9] in England and Scott and al in united states, who have not noted any complications. It must howver signale that thein series realize only 5 cases of each. The fact treatments achieved by surgeons at the beginning of specialization. Harouna [6] in Niger reports a recidive of 2% identic to the result of Ngom in Senegal. Our result is superior than the one of Harouna [6] and Ngom. We think that the high rate can be explained by the fact that these umbical hernias one pirated by students at the beginning of specialization.

Howe ver Harouna [6] in Nigeria report a lasse of death in his study.

Tis result is the same as the one of DIARRA [4] in Mali. "Scott" in united states and the one reported in literature. It's contrary to the one of Harouna [6] in Nigeria the report the greatest number of complications (15.3%).

Other complications like hemorhagy, hematom haven't been found in our study but they have been described in the in the literature [2, 5, 6].

In our study we didn't put any as for most of the authors [2, 4].

During that study all the complications have been observed before the age of 5 years but without any difference statistically significant between the groups of age. Most of the complications are observed in the umbilical way (8 cases). In the sus umbilical way and left para-umbiblical it has been noted that one case in each, that could be explained by the fact that the high-currence in our study at first un den umbilical that seemed to be easier for operators, but we can't say that way intervains before significant. We have seen 4 cases of complications among 33 patients getting a large collar and 6 cases of complications among 58 patients with middle collar. How ever the diameter of collar insn't a determind factor in the happing of complications because there is no different statistically significant (P=0,98). The majority of complications was observed when the time of intervention was superior or equal 30 minutes. After analysis multivarious by logistics regression the only complications (ORC1; P= 0,04) The more duration of intervention was less shorthan we observed complications.

We haven't had any infectious complications either hemorhagic or hematom. The death was null in air study.

The granuloma is a in flammatory productive reaction due at the presence of fil suture. A bad apply of operatory technic favorise it's a tool non resorbable which can be the origin of rejection [4, 14].

We have noted 2 cases in our study letters comparable to data of literature [2, 5, 6, 4] Cissoko *et al*., [3] has reported in his study a high note of (2,06%). Troubles of scan are represented by hypertrophic scan. We have found 5,49% in our study this rate is superior than the one of Diarra *et al*., [4] in Mali (2%) and the

one of Cissoko *et al*., [3] in Senegal (3%). This high percentage in our serie could be faced even if those haven't been reported.

CONCLUSION

Then complications after a treatment of simple umbilical hernia are not soldom. To improve results we recommend of to reduce as far as possible the time of intervention allowing to minimize these complications by supervising always the young or by letting the adults to treat.

ACKNOWLEDGEMENTS

We would like to thank Dr. Aboubacar Sidiki Thissé KANÉ, Dental Surgeon Periodontist for his help in preparing this document.

Conflicts of Interest: There are no conflicts of interest.

REFERENCES

1. Amstrong, O. (2003). Umbilical Hennias Prat, 53, 1671-1676.
2. Chirdan, L. B., Uba, A. F., & Kidmas, A. T. (2006). Incarcerated umbilical hernia in children. *European journal of pediatric surgery*, *16*(01), 45-48.
3. Cissoko. (2011). Morbidness and death linked sungical treatment of the umbical hernia for children ''CHU'' Aristide Dantec Meddecin thesis Dakar, N° 137.
4. Diarra, M. (2008). Umbilical Hennia of child O hospital Fouseyni Daou in Kayes medecin thesis Bamako, N°208.
5. Donald, E., David, A., Mein, M. D., Olealorun, Pacchael, A., & Omodel, R. N. (2001). Umbilical hernia Africain child. *Word I sung*, 25, 648-645.
6. Harouna, I., Gamatie, Y., & Abarchi, H. B. (2001). Umbilical hennia of black child: clinic aspects and results of treatment about 52 cases. *Med Afr Noire*, 48(6), 266-269.
7. Hureau, J. (1978). Abdomen wall (hennias, ruptures and eviseerations). In: Patel, J. C., eds. Sungical pathology. 3rd edition Paris: Massan and cie; pp.471-499.
8. Juskiewenski, S. (1985). Umbilical Hennias of child. In: Chevrel, J. P. Sunungy abdomen wall. Benlin: Springen-verlag, pp.277-279.
9. Keshtgar, A. S., & Griffiths, M. (2005). Incanceration of umbilical hennia in childnen: Is the trend increasing? A tenyearaudit. *Afr J Urol*, 11(2), 101-104.