How did the ancient surgeons deal with pediatric urological problems in 18th century?

Ebru Yesildag,
Rubén Martínez Muñiz,
S.N.Cenk Buyukunal

Istanbul, Turkey
Aim of the Study

to present the treatment strategies in children with various surgical-urological problems in a Textbook of Surgery published in 1749 in Madrid by "Francisco Manuel de Mena"

Materials & Method

.second-hand bookstore, Lisbon, Portugal(100 E)
.started to learn Spanish
.translation with a native Spanish teacher
Instituciones Chirurgicas, Cirugia Completa Universal

Lorenz Heister

Miguel Francisco Rodríguez
INSTITUCIONES
CHIRURGICAS,
Y
CIRUGIA COMPLETA UNIVERSAL,
ILUSTRADA CON GRAN NUMERO
de laminas finas, y muy fieles, que demuestran
al natural los mas preciosos instrumentos, y
Operaciones Chirurgicas.
TRABAJO, Y ESTUDIO
EN QUE POR MAS DE QUARENTA AÑOS SE EMPLEÓ EL DESVELO
del Doct. D. Laureano Hefner, primer Medico, Cirujano, y Conferencio Auxilio
del Serenísimo Duque de Brunsvich, y Luneburg, &c. Catedrático
de Medicina, Cirugía, Anatomía, y Botánica en la Academia
Jullacense de Helmstäd.

TRADUCIDA DE LA LENGUA LATINA, Y AñADIDA,
según la última impresión del mismo Autor, por D. Andrés Garcia Vasques,
Cirujano de Familia de su Magestad, con exercicio, y Colegiado Fundador
del Real Colegio de Cirujanos de Madrid.

QUIEN, POR MANO DEL EXCM. SEÑOR D. JOSEPH DE CARVAJAL
y Lanzaller, Decano del Consejo de Estado, &c. la dedica al Rey
nuestro Señor.

TOMO TERCERO.
Con Privilegio. En Madrid. POR D. MIGUEL FRANCISCO RODRIGUEZ.
Año de 1749.
Se hallará con el primero, y segundo, con la Cirugía de Hipocrates, y Anato-
mática Chirurgica, en la Librería de Francisco Añenzia, junta al Carrero, y en
la de Francisco Manuel de Mena, Calle de las Carretas.
1749, Madrid
third volume
CAPITULO CLXIII.

COMO DEBE ABRIRSE EL AÑO cuando está cerrado.

No para vez suele acontecer, que en los niños recién nacidos se halle el año más cerrado, y cada uno con su que naturalmente conviene, á cuyo efecto fungen las Medidas arrestos. Cuando los niños padecen este mal, la mayor parte se conoce (si ya de antemano no se tuvo provisto) en que en aquellos días inmediatos á la nación, no expelen ningún humor excrementicio y por ello, no tienen advertidas las Obstetricas de intervenir hasta luego, cuando las partes naturales se hallan en buena conformación, y ejecuten sus acciones debidas, como docilmente la Respujisa, y Petit en los Actas de la Academ. Chir., t. 1. pág. 377. y 387. Estos vicios suelen ser de varias maneras, según la diferencia de regímenes, que tienen el uno por la mayor parte se suele observar, que en aquella parte, puede estar perforada, se muestra alguna prematuridad, ó una vía obstruida; bien que algunas veces nada de esto se conoce;
Capítulo CLXIII.
DE COMO DEBE ABRIRSE EL ANO cuando está cerrado

- the disease & its types
- thin membrane, how should it be perforated
- be prepared before the procedure
- how should the incision be done in the presence of a thick tissue
- what should be done if there is not any sign of intestine
- references to some rare observations
suffer severe abdominal pain, vomiting, jaundice, abdominal distention, epilepsy

when thicker membrane is the case, the curation is not without danger

Case: all rectum to the colon or superior of sacrum was totally closed or absent

Case: all rectum was closed or terminated into the bladder / in girls into the vagina
thin membrane, how should it be perforated

1. Place the infant on the assistant's knees in a position that will provide the surgeon to see, distinguish and treat the anus comfortably.

2. Take a scalpel with two cut edges, introduce it into the membrane as if you are draining an abscess.

3. If you do it properly, meconium will flow out spontaneously.

4. Lubricate your finger with oil and introduce it to explore if it is sufficient for free flow of the excrements.

5. If it is stretching, dilate it on both sides.

6. Or make another transverse incision, figure of a ring is much proper and comfortable for the anus.

7. Wait until the infant expel all the excrements inside.

8. Introduce a big gauze lubricated with oil, repeat this for several days until a round cicatrix forms.

There is a hope for treatment. Whole work to do is to open the anus or the end of the rectum perfectly.
be prepared before the procedure

- do not think that prompt treatment is less necessary
- much danger in delay
- infant suffering for several days dies at the same time you open the anus
how should the incision be done in the presence of a thick tissue

- actually, it is difficult to save the infant
- although it should be improbable, it is better to attempt a treatment with hope instead of leaving the sad, miserable infant to a certain death...

1. investigate with finger, for a good luck, if there is any vestigial or hole that can be associated with the rectum
2. if yes, sign it with ink, and make a transverse incision
3. if no excrement flows, continue exploring with finger and incise again, go deeper slowly until the anus or intestine perforates. Prevent that the tip of the iron no directs into the pubis, bladder, vagina, or sacrum. If the anus perforates, continue with the method explained in num. 2
what should be done if there is not any sign of intestine

- not desperate, but has a difficult treatment
- to attempt and expect a suspicious cure is better than to leave the infant to death without help
- triangular clave or narrow scalpel
- if profuse bleeding occurs, put a gauze inside
- if it is not opened with this maneuver also, as a truth there will be no motive and no medium to preserve the infant as violent vomiting and convulsions or epilepsy begin; the infant dies miserably…
references to some rare observations

Case: 4/12, female, had an anus but was narrow
Mom dilated it with fingers, severe swelling & totally closed
abdomen distended, severe pain, fever, anxiety, nearly dying
incision, dilatation

Some girls have an anus that almost look like natural but
is closed. The rectum diverts the feces and pass it out
from the vagina of the uterus. This disease rarely
indicates treatment and these women suffer this in all of
their lives
I observed the same in a newly born girl in 1722. I introduce a thin probe and amplified it as the author suggests, she survived happily: now lives in Fuencarral Street, is married and has children. Whenever she sees me she becomes blushed, (as they say) I can not prevent myself from smiling.
Chapter CXXXIII
How should cut or resolve the frenulum of the penis

- When treatment is indicated?
  - If frenulum stretches or retracts the glans
  - If there is a bending in distal shaft during erection
  - Also in men with gonorrhea, phymosis and paraphymosis

Principal of treatment: Same as in short frenulum in tongue
How it is performed?

• It is cut with a scalpel cautiously and it is cut, until the penis extends freely.
• Penis should be placed on a strong cartoon, thin wood or a metal tube so that slowly it becomes straight.
• If it is more than a short frenulum, a real chordee: **emollient creams** should be applied to the contracted area or **some incisions** had to be done in order to reduce the curvature.
Chapter CXXXVI: How should treat the urinary incontinence

• Etiology:
  - Bladder stones may induce incontinence
  - Debility
  - Paralysis of the sphincter
  - When body or the sphincter of the bladder is weak

• Medical treatment:
  - Comforting medicines
  - Medicines nervinos
Other treatment

- A leather instrument which covers the penis (washable, re-usable)
- An instrument designed by Surgeon Nuckio (easily tightened or loosened)
• A modified, similar instrument
Other treatment (cont.)

- Instrument advised by Nuckio and Voinflovio (Corpus and posterior urethra is encircled with shield F; it is tightened by trochlea D)
Conclusions

• Author of this book “Miguel Francisco Rodríguez” has not only translated the Textbook of Lorenz Heister but put some interesting innovations and experience in it.

• His observations and experience on:
  a) anorectal malformations
  b) Devices for the treatment of urinary incontinence

is remarkable.