

DIAPHRAGMATIC HERNIA IN THE NEW BORN

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The diaphragm separates the negative pressure chest cavity from the positive pressure abdominal cavity. Its passage through the esophagus is the main weak point at the origin of hiatal hernias (the most frequent) and diaphragmatic hernias (rare), these may be Bochdaleck hernias = congenital hernia of the diaphragm = left posterolateral hernia (rarely right) or Retro-costo-xyphoidal hernias = H retro-sternal or para-sternal

Material and methods

❑ 14 cases collected in our department between 2009-2017:
05 Bochdaleck hernias, 09 anterior hernias (03 cases of right hernia of Morgagni and 06 cases of left hernias of Larrey)

❑ Symptoms:

03 cases: emergency context (neonatal manifestation).
09 cases: in the context of a review of chronic symptoms (vomiting - cough - postprandial epigastric discomfort - RSP),
02 cases: accidental discovery (minimal post-traumatic stress - preoperative assessment of a hydrocele)
Age at the time of diagnosis: 01 day - 03 years (no antenatal diagnosis), Sex: 09 girls for 05 boys, Birth weight: usually normal with extremes (1650 gr - 5200 gr)

❑ surgery

laparotomy 14 patients, never laparoscopy?

Incision:

- umbilical median : 09 cases
- Costal incision right: 02 cases
- Umbilical transverse incision: 03 cases
- Thoracotomy (never).

Hernied organs:

04 cases: small intestine + transverse colon + spleen
02 cases: ¾ transverse colon + large epiploon
04 cases: Left lobe of the liver + part of the stomach
03 cases: Right lobe of the liver + gallbladder + right colon and transverse.
01 cases: Whole liver + small intestine

❑ associated malformations

04 cases: intestinal malrotation

03 cases: heart defects.

01 case: macrosomia

02 cases: fetal hypotrophy

02 cases: prematurity

❑ Postoperative evolution:

favorable evolution overall except for some signs of bronchopulmonary disease

02 scoliosis

01 occlusion by flanges

01 GER (Nissen)

03 deaths: (02 neonatal forms + 01 associating several malformations)

Comments:

The antenatal diagnosis is not carried out under any circumstances.

The deceased cases in our series (03 cases) are of acute neonatal manifestation.

The 11 live cases are of late +/- manifestation.

The pulmonary hypoplasia is found in 09 of our patients to different degrees conditioning the prognosis.

Associated malformations can worsen the prognosis.

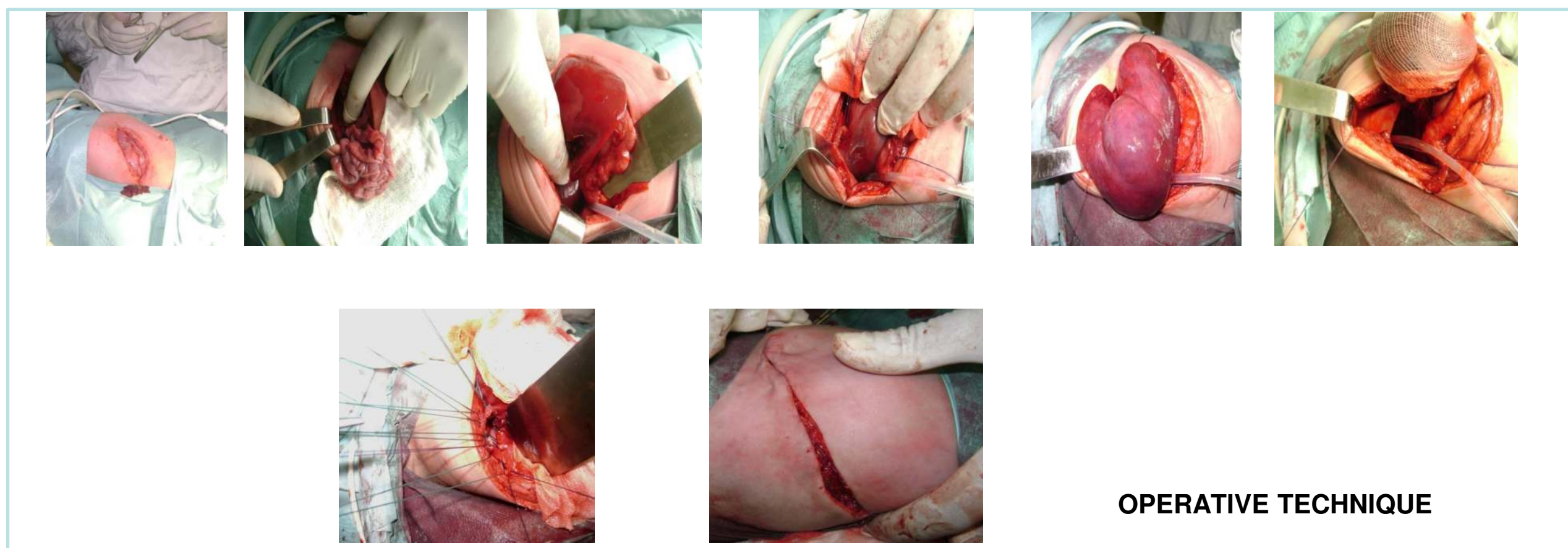
The treatment is always surgical and undertaken from the diagnosis posed in order to avoid complications

Conclusion:

It is time to progress in the reflection and review the difficulties of taking care of neonatal forms especially in neonatal resuscitation.

Interest to develop the antenatal diagnosis in our country and to condition the newborns carrying a diaphragmatic hernia in order to be able to operate them in the best possible conditions.

No need to operate a child in respiratory, circulatory, uncontrolled metabolic conditions



Sources:

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Treatment evolution in high-risk congenital diaphragmatic hernia. Ann Surg 2006;244:505-13

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3) Dalencourt G, Kattic MR. Abdominal compartment syndrome after late repair of Bochdalek hernia. Ann Thorac Surg 2006;82:721-2