The Corner

M. Sánchez Martín*, M. Gómez de Pablos Romero**

*Residente de Pediatría del Hospital Universitario La Paz.
**Residente de Pediatría del Hospital Universitario de Móstoles.

15. Resident-attending in the ED: Infantile hypertrophic pyloric stenosis (IHPS)

Resident: Hi Dr. Geller, I'm a bit worried about a child I've just seen. May I discuss it with you, please?

Attendant: Sure, tell me about it.

Resident: Bobby is a 1-month year-old baby, born pre-term with no other relevant clinical history, who has been brought into the ED for continuous vomiting over the last two days. He hasn't had fever nor diarrhea and he hasn't lost his appetite, he breastfeeds as usual. His urine output is mildly diminished.

Attendant: How are the vomits? Does he vomit after every feeding? Has there been any change of milk? Does he have any other signs of infection?

Resident: Normally he has small regurgitations, but over the last couple of days the vomits seem to have become projectile and more frequent, after every feeding. They are nonbilious. His mother thinks he's hungry and demands to be re-fed soon after the vomits. He's been exclusively breastfed since birth. He doesn't have a cold or any other signs of infection.

Attendant: OK, what about the physical exploration? Are there any important findings?

Resident: He has an acceptable general condition and is well-coloured, although his mucous membranes are a bit tacky. However, he is not tachycardic and has a normotensive anterior fontanelle. He is awake and alert. The cardiopulmonary auscultation and HEENT are normal. The abdomen is a bit distended, although soft, apparently nontender to palpation and with no masses or organomegaly.

Attendant: So what is your suspected diagnosis?

Resident: It doesn't seem like a gastroenteritis. It could be gastroesophageal reflux, but the symptoms are too noteworthy and there has been a clear change in the form of presentation. The projectile vomiting with no loss of appetite and the mild dehydration are highly compatible with infantile hypertrophic pyloric stenosis.

Attendant: Taking into account the anamnesis and the physical examination, I agree. What should we do now?

Resident: First of all, we should do a blood test, which can orientate the diagnosis and inform us of the state of hydration and severity. However, the way to confirm an IHPS is with an abdominal ultrasound.

After an hour…

Resident: Dr. Geller, we have the results back. The blood test shows: pH of 7.45, base excess of +2, sodium of 139, potassium of 3.5 and chloride of 96.

Attendant: Alright. As you know the typical laboratory finding in IHPS is an hypochloremic alkalosis. Nevertheless, our patient only started with symptoms two days ago, so a normal blood test doesn't rule out this disease.

Resident: That makes sense. I'll ask for the abdominal ultrasound then.

30 minutes later...

Resident: Dr. Geller, I saw Bobby's ultrasound and I could clearly see the "target" sign so I talked to the radiologist and he confirmed the diagnosis of IHPS.

Attendant: Okay, do you know what the treatment is?

Resident: Yes, the elective treatment is to perform a pyloromyotomy. Should I call the surgeons then?

Attendant: That's right! Yes, call the surgeons but make sure that you inform the parents first.

KEY WORDS:

Infantile hypertrophic pyloric stenosis: estenosis hipertrófica del píloro.

Urine output: diuresis.

Mildly diminished: levemente disminuido.

Projectile (vomits): vómitos proyectivos

Nonbilious (vomits): vómitos no biliosos.

To be exclusively breastfed: alimentarse con lactancia materna exclusiva.

Distended (abdomen): abdomen distendido.

Organomegaly: organomegalia.

Suspected diagnosis: diagnóstico de sospecha.

Gastroesophageal reflux: reflujo gastroesofágico.

Noteworthy: significativo.

Blood test: analítica de sangre.

Orientate the diagnosis: orientar el diagnóstico.

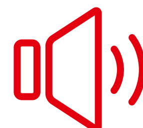
Base excess: exceso de base.

Hypochloremic alkalosis: alcalosis hipoclorémica.

"Target" sign: signo de la diana.

Elective treatment: tratamiento de elección.

Pyloromyotomy: Pilorotomía.



PLAY AUDIO

se puede escuchar en www.pediatriaintegral.es