Notes

Reflections on five surgical cases admitted to a general Medical ward

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Abstract

The authors briefly report five cases of patients admitted to a general medical ward for problems which were later proven to be surgical. This short series shows the difficulties in correctly diagnosing abdominal surgical disease in the casualty department. This problem is particularly difficult in elderly patients, who are often unable to express their complaints clearly.

The importance of a careful and accurate history, as well as its prompt interpretation in critical disease is emphasized.

Keywords: surgical abdomen, medical wards.

Introduction

I offer an initial reflection here, before giving a brief description of a casual series of patients admitted to a department of the Medicine Service I, over a ten--month period, with a pathology that proved to be predominantly surgical.

Reflecting on the art of diagnostics, we believe that the diagnosis depends, above all, on three primary factors: the patient's ability to complain, the doctor's ability to understand the complaints as relevant, and only then, the noble ability to interpret the data from the clinical history, an objective examination and complementary exams. Written like that, it seems simplistic and almost obvious, but the reality that we live in is practical, and far removed from the examples given in the Medical books, which are usually highly selective.

In order to justify these subjective concepts and introduce the summary casuistic, a short history is composed, with common elements to numerous cases experienced:

Imagine an elderly person living in a so-called "home", demented and groaning, brought into the Emergency Service on a Friday afternoon, the busiest time of the week. The elderly patient is complaining, and groaning. He groans when his feet are touched, or his abdomen; he groans when sat in an armchair to take his blood pressure, which is low. He has bedsores, malnourished, and extremely dehydrated; he appears to be neither too warm nor too cold; the thermometer of the "men's ward counter" is broken. The family member accompanying him claims she went to fetch him at the "home" because he seemed "different". The doctor, worn out from trying to get the patient to sit up so he can listen to his chest, asks "Different in what way?". The family member replies "He didn't seem well to me" and adds "Doctor, I haven't visited for over two weeks". The objective examination provides very little information, the ankylosis and Parkinsonian stiffness are very limiting. The analyses show marginal leukocytosis, normal hemoglobin, and a moderate increase in urea. The remaining biochemical tests show no alterations. Chest X-ray shows pre-existing lesions. To the doctor, the patient also does not appear to be well, and he is admitted. The doctor ponders for a moment, then writes something on the admission diagnosis report. The patient is clearly dehydrated, so he decides to write "dehydration".

Case series

Case 1

J.B.L., male, 76 years, admitted to the Emergency Service of the Hospital de Santa Maria on 16th April 1996 with incoercible alimentary vomiting and cessation of gas emissions and stools with onset six days earlier. History of tuberculosis and appendicectomy.

He was transferred to the Medicine I-C Service with a diagnosis on admission of "dehydration". The in-house emergency doctor was called as the patient

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presented faecaloid vomiting and abdominal distension; a diagnosis of "intestinal occlusion" was made. Support treatment was given, with hydroelectrolytic correction, while awaiting the decision from the successive surgeons consulted. It ending up being the head of the night admissions shift who resolved the problem, on 19th April (day 4 of admission), and it was he who transferred the patient, whose abdominal distension was worsening, and who was starting to have difficulty remaining metabolically stable. Surgery revealed "peritoneal adhesions", determining occlusion of the descending colon.

The patient died in the long-term posteroperative period.

Diagnoses: intestinal occlusion due to adhesions; incoercible vomiting; metabolic imbalance; history of tuberculosis.

Case 2

E.M.C., female, 81 years, admitted on 8th May 1996 to the Emergency Service of the Hospital de Santa Maria with abdominal pain, vomiting after eating, and cessation of gas emissions and stools commencing five days earlier. History of cholecystectomy.

She was transferred to the Medicine I-C Service in the morning of the same day, with a diagnosis on admission of "dehydration".

On the ward, on observing the patient, a diagnostic of "strangulated left crural hernia" was made. After contacting the head of the surgical team, the patient was transferred to the surgical block and submitted to surgical intervention, 2 hours after admission to our service. It was possible to "save" the strangulated loop.

The patient was discharged, in improved condition.

Diagnosis: strangulated crural hernia.

Case 3

G.M., female, 80 years, hypertensive, admitted on 13th August 1996 to the Emergency Service of the Hospital de Santa Maria, after visiting the "CATUS" (local emergency service) near her home, with intense abdominal pain with sudden onset. She was carrying a letter addressed to the surgical team, with a diagnostic hypothesis of "acute appendicitis".

She presented acute/present abdominal pain, disorientation, polypnoea, tachycardia of 130/min and BP of 191/113 mmHg. Diffuse pain on palpation of the abdomen. Chest radiography showed pre-existing lesions of tuberculosis. Laboratory tests, leukocytosis and neutrophilia. E.C.G.: sinusal tachycardia.

Admitted to the S.O. –A (Observation Service A), where she was observed by a surgeon who was of the opinion that the condition was not acute abdomen. The patient was transferred on 13th August 1996 to the Medicine I-C Service with diagnoses of "pneumonia and abdominal pain".

On the ward, the patient presented diffuse abdominal contractions, with continuation of very painful abdomen. BP decreased. A second E.C.G showed a pattern of acute and extensive ischemia (V2-V6). Hypotheses were proposed of aortic dissection, ruptured aortic aneurysm and mesenteric thrombosis. Ultrasound and CT scan of the abdomen were carried out, which did not show any signs of dissection; the aorta was narrow and calcified.

The case was reevaluated by the same surgeon, who agreed that it was a case of acute abdomen, and the patient was transferred to the surgical block, where a diagnosis of mesenteric thrombosis, with extensive intestinal necrosis was confirmed intraoperatively, and subtotal resection of the small intestine and right hemicolectomy were performed, with transverse termino-lateral jejunal osteotomy, without any immediate complications.

Diagnoses: thrombosis of the mesenteric artery; extensive intestinal necrosis; acute coronary insufficiency; pre-existing tuberculosis.

Case 4

A.M.F., female, 81 years, an Indian Muslim, transferred to the Hospital Militar Principal where she was admitted from the 6th to the 7th January 1997 with complicated epigastralgia and haematemesis with deterioration of renal function, due to a lack of beds at the Family Medicine Service. While still at the H.M.P. upper digestive endoscopy was carried out, revealing: active duodenal ulcer, recent hemorrhage, esophageal candidiasis.

The patient was a diabetic, taking oral antidiabetic drugs, and was not able to provide any anamnestic data as she spoke only in her Indian dialect. She arrived at the Emergency Service on the 7th January 1997, and was alert, with high blood pressure (BP = 95/45 mmHg), pulse 68/min., and with abdominal observation described as normal. Analyses documenting decrease in hemoglobin of 13.6 to 11 g/dL and increase in urea and creatinine, of 85 and 1.47 mg/

dL to 128 and 2.51 mg/dL, respectively.

The patient was transferred to the ward, where observation revealed severe dehydration and contraction of the rectum at the level of the epigastrium. A hypothesis was proposed of peptic ulcer perforation, and a simple x-ray of the abdomen was requested, with the patient standing, which showed exuberant pneumoperitoneum. In view of this finding, the case was presented to the surgeon on duty and the patient was operated on successfully (epiploplasty was performed) on the same day as admission.

However, the patient's son informed us that his mother had taken various medications for osteoarticular pain, and that she had suffered epigastralgia for one year.

The patient was discharged, in improved condition.

Diagnoses: perforation of peptic ulcer; acute abdomen with pneumoperitoneum; dehydration; pre-renal uremia; non insulin-dependant diabetes mellitus.

Case 5

M.L.M.C., female, 39 years, admitted on the 12th January '97 with prostration. With complaints of diffuse abdominal pains for 4 days, repetitive vomiting and diarrhea without blood. She had a history of manic--depressive psychosis treated with lithium.

On entry, at the admissions ward the patient was very dehydrated, without unmeasurable BP, and without fever. Hemogram and ionogram showed no significant alterations.

She was transferred to the ward on the night of 13th January '97, with haematemesis at around 3 o'clock in the morning. There was no decrease in Hg value. Observed at 7 o'clock she was in shock, with sinusal tachycardia of 150/min, and still with unmeasurable BP, with generalized livedo and difficulty breathing. Re-evaluation showed blockage of the lower quadrants of the abdomen; a paracentesis was performed and homogenous pus was collected at two separate points. Arterial blood revealed extreme acidaemia (pH = 6,94). Despite attempts at haemodynamic recuperation and correction of the acidosis, the patient died of diastolic heart failure at 8.45 hours.

Autopsy was requested, due to a hypothesis of peritonitis by intestinal perfusion. Necropsy revealed purulent peritonitis, perforation of an ulcerated and abscessed lesion of the rectum, and ascaridiasis.

Diagnoses: purulent peritonitis; perforation of ulcerated lesion of the rectum; state of shock; manic depressive psychosis; ascaridiasis.

Comments

The occurrence of five cases of acute abdomen in the case series of a five-bed ward, within a period of ten months (April 1996 to January 1997) is impressive. Since a total of 100 patients were admitted in this period of time for the causes in question, it is concluded that abdominal surgical situations are referred, with considerable frequency (1 case per 5 beds, every 2 months) for admission in Internal Medicine.

Clearly, the reality is not quite so; there are exceptions, or as the "law of small series" prefers to say, a theorizing concept.

In fact, the present series would have been larger if we had included cases from other sectors, which were diagnosed during the periods of surveillance on the wards of the Service ("internal emergency"), but we opted to record only the summary data of our patients. As these are the ones we are most familiar with.

We are not guided by any statistical intention; this text is strictly clinical in scope. And nothing prevents us from writing about impressions gathered in the clinic, there are some important precedents.[1]

Let us look at this small case series in detail:

Firstly, four of the five patients were elderly, and the only exception had difficulty expressing herself, due to evolved psychosis. Would it be too much to assume that communication problems contributed to the difficulty of diagnosis? We think not, and that it would be reasonable to attribute to them a causal role.

Also, four patients presented "dehydration" as the diagnosis on admission, whether directly formulated or suggested. Although there are many cases in which the primary diagnosis cannot go beyond a symptomatic (or syndromatic) nature, febrile syndrome, anemia to be clarified, ascitis under tension, the fact is that one of our cases (no. 1) already had a definitive diagnosis made by the doctor who referred her to the hospital, that in two cases, important data were apparent in the objective examination – crural hernia (no. 2) and signs of peritoneal suffering (no. 5), and that in another (no. 4), clarification was possible using a very simple complementary exam (x-ray of the abdomen, without preparation or contrast). Only in case no. 3, thrombocytosis of the mesenterium, was the diagnostic process somewhat laborious.

Another aspect to consider is the difficulty (not

infrequent in our experience) of surgical reevaluation when the patient is already admitted to Medicine. In the short case series presented here, this was clear in cases 1 and 3, and it is presumed that the consequent delay in intervention was undesirable in the first case.

In fact, two of these five cases died, no. 1 in the late postoperative phase, no. 5 without having reached the stage of surgical intervention. Lamentably.

Of what occurred less well in these five cases, notably the diagnostic failings, justice demands a reevaluation of the current conditions of operation of the Emergency Service, which is staffed by very small teams, sometimes five physicians (?), divided across two screening posts and one or two immediate treatment nurses, not all of which are highly experienced, and all in a hurry due to the need for rapid screening. It should be added that the high number of patients that remain in treatment and prolonged observation, in the wards called SO-A and SO-B, means repeated "discharges" to the admission Services are necessary, usually to the Medicine services, where there are periods as long as around 70 hours (weekends) with a single doctor on duty, having in his care sixty, seventy, and sometimes eighty patients (common in the larger Services, like ours) of which he only studied half a dozen cases that are attributed to him.

If there is some important conclusion to be drawn from the five cases described here, we would opt for something that is becoming a firm conviction: the hospitals may have (as say certain authorities say) many medical employees, but they are ailing, today, due a clear lack of physicians.[2]

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