



Contents lists available at ScienceDirect

European Journal of Obstetrics & Gynecology and Reproductive Biology

journal homepage: www.elsevier.com/locate/ejogrb

Full length article

Chronic adnexal torsion: An under-recognized disease entity



Akihiro Takeda*, Shotaro Hayashi, Yoshie Teranishi, Sanae Imoto, Hiromi Nakamura

Department of Obstetrics and Gynecology, Gifu Prefectural Tajimi Hospital, Tajimi, Gifu, Japan

ARTICLE INFO

Article history:

Received 27 September 2016

Received in revised form 17 November 2016

Accepted 3 December 2016

Available online xxx

Keywords:

Acute adnexal torsion
 Chronic adnexal torsion
 Diagnostic imaging
 Isolated tubal torsion
 Laparoscopic surgery

ABSTRACT

Objective: To clarify the incidence, clinical background and surgical characteristics of chronic adnexal torsion in comparison to acute adnexal torsion.

Study design: The patients were divided into three categories based on the period from the onset of symptoms to surgical management: acute (≤ 24 h), subacute (2 days) and chronic adnexal torsions (≥ 3 days). Cases, in which the onset of symptoms was unspecified, were included in the chronic adnexal torsion group. Then, a retrospective comparative study of acute (49 patients) and chronic adnexal torsion (45 patients) was performed. Laparoscopic surgery was performed as a primary surgical procedure.

Results: In chronic adnexal torsion, surgery was performed at a median of 9 days (range: 3–270 days) after the onset of symptoms. The apparent onset of symptoms was not noted in 2 cases. All cases with acute adnexal torsion received emergency surgery. In contrast, emergency surgery was performed only in 13 patients with chronic adnexal torsion. Patients with chronic adnexal torsion were significantly older than those with acute adnexal torsion. Isolated tubal torsion was more frequent in chronic adnexal torsion. With the exception of 2 cases with chronic adnexal torsion in which laparotomy conversion was required due to severe adhesion, and 2 cases with acute adnexal torsion with advanced gestational age, who were managed by initial laparotomy, laparoscopic surgery was successful. Unilateral salpingo-oophorectomy was the most frequent surgical procedure in both groups. When confined to the patients who expressed a wish for adnexal preservation, adnexal cystectomy or detorsion was possible in 60.9% of the acute torsion cases and 57.1% of the chronic adnexal torsion cases. Severe necrosis of the adnexal tissue and extensive pelvic adhesion were the more frequent associated conditions in chronic adnexal torsion. Among the patients who were successfully managed by laparoscopic surgery, the duration of surgery was significantly longer in the patients with chronic adnexal torsion. Severe necrosis that makes a pathological diagnosis difficult was the most frequent finding in cases of chronic adnexal torsion.

Conclusion: Chronic adnexal torsion still represents a diagnostic and therapeutic challenge that should be recognized as a distinct and more frequently encountered disease entity.

© 2016 Elsevier Ireland Ltd. All rights reserved.

Introduction

Adnexal torsion is an infrequent gynecologic emergency that is caused by the twisting of the adnexa, ovary, or more rarely the tube alone, around the centerline, which consists of the infundibulo-pelvic ligament or the tubo-ovarian ligament [1–3]. Torsion can cause a drop in the adnexal circulation. If the blood supply to the adnexal tissue is not restored [4], persistent vascular occlusion of the adnexal structures may eventually cause gangrenous and hemorrhagic necrosis of the fallopian tube and ovary [5,6]. Thus, prompt surgical management is crucial when adnexal torsion is suspected based on clinical and imaging evaluations to avoid potential morbidities with a loss of fertility [7].

The known clinical features frequently associated with acute adnexal torsion include the sudden onset of severe abdominal pain [1–7]. However, the clinical presentation caused by adnexal torsion is often nonspecific with few distinct physical findings, which makes it indistinguishable from other abdominal disorders [5]. Furthermore, the imaging features associated with adnexal torsion are sometimes equivocal [4–6].

When the consultation of the patient is delayed due to a subacute or chronic clinical presentation, and/or a delayed diagnosis by treating physicians, the correct diagnosis of adnexal torsion can only be made after abdominal inspection [8]. As a result, the outcome of the excision of adnexal tissue could often become unsatisfactory for the patients and treating physicians. It is therefore important to clarify the clinical and surgical characteristics in adnexal torsion patients who show a chronic disease course. However, the description of such features in the literature is still limited [1,7,9,10]. Based on our accumulated experience, the

* Corresponding author.

E-mail address: gyendoscopy@gmail.com (A. Takeda).

chronic manifestations of adnexal torsion are evaluated in a case series, and the incidence, clinical background and surgical characteristics are described and compared with acute adnexal torsion.

Materials and methods

Patient characteristics

The present study was performed by a retrospective review of the cases of surgically confirmed adnexal torsion (which includes entire adnexal torsion as well as isolated tubal torsion) in the electronic database at Gifu Prefectural Tajimi Hospital (Tajimi, Gifu, Japan) between January 2006 and May 2016.

For descriptive purposes, the patients were arbitrarily divided into three categories based on the duration from the onset of symptoms to surgery [9]: acute (≤ 24 h), subacute (2 days) and chronic adnexal torsion (≥ 3 days).

Ultrasonography was performed in the initial examination of all cases. If necessary, magnetic resonance imaging (MRI) and/or computerized tomography (CT) were performed to further evaluate the characteristics of adnexal mass. The hematological examinations included a complete blood count and the measurement of the C-reactive protein (CRP) level. The patients' serum levels of tumor markers were measured, with the exception of cases with apparent functional cysts.

When a patient with an adnexal mass presented significant abdominal symptoms that were suggestive of adnexal torsion, emergency surgery, defined as surgery that was performed within several hours after deciding that surgical intervention was necessary or of potential benefit, was performed. In other cases, urgent or scheduled surgery was performed after the individual evaluation of signs and symptoms by the treating physicians. Urgent surgery was defined as surgery that was performed in a timely manner, but there were cases in which a delay until the next day or later (within a few days) was allowable and was not associated with undue risk to the patient.

Laparoscopic surgery was chosen as a primary surgical procedure [11–13]. However, in cases with advanced pregnancy, in which laparoscopic surgery was assumed to be difficult due to a large uterus, initial laparotomy was performed. Preoperatively, informed consent, including a statement that conversion to laparotomy might be required if the disorder could not be managed by laparoscopic surgery, was obtained from the patient and her family. If the patient was unable to understand the pathological condition due to either younger age or symptoms such as severe pain, the explanation was only given to her family [13].

The data that were collected included the patient demographics, the duration from the onset of symptoms to surgery, the surgical procedures, pathological diagnosis, and postsurgical morbidities. A pathological diagnosis was not obtained in cases

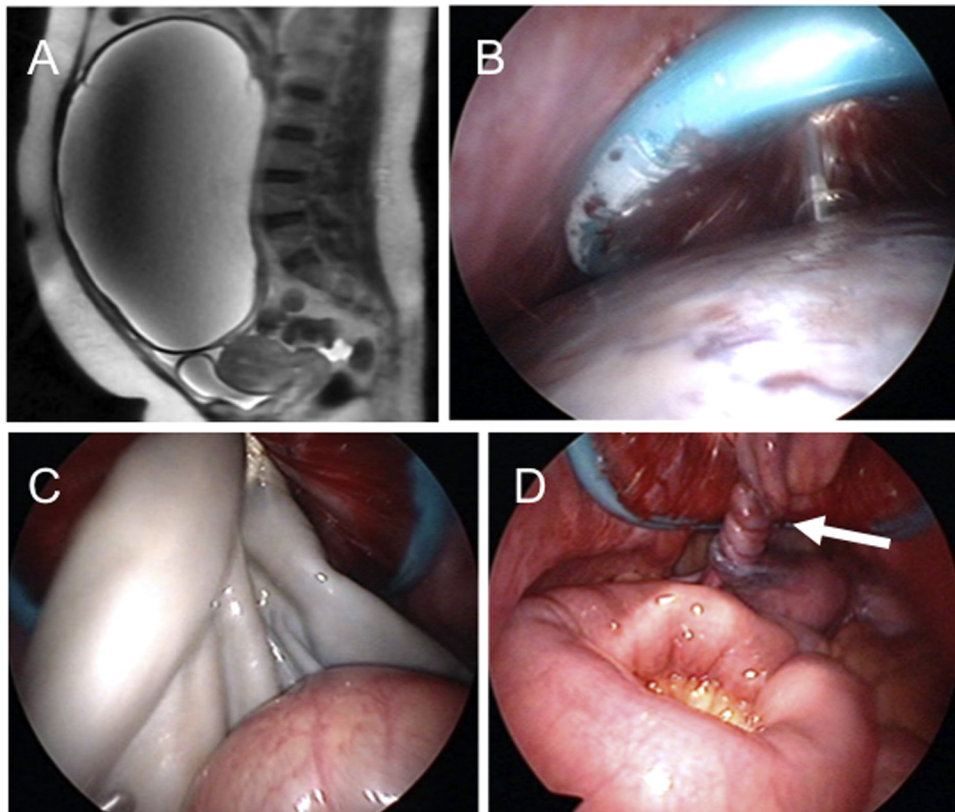


Fig. 1. Gasless multi-port laparoscopic left salpingo-oophorectomy for a large ovarian tumor in a 44-year-old multipara woman with chronic adnexal torsion. The patient's history included one cesarean section. The patient was referred by a private physician due to the presence of a palpable abdominal mass at 11 days after the onset of abdominal pain and vomiting, which subsequently subsided spontaneously. At the examination, the patient had no apparent abdominal symptoms requiring emergent intervention, and elective surgery was performed on the 28th day after the onset of symptoms. (A) Sagittal T2-weighted magnetic resonance imaging revealed a large multi-cystic mass measuring 26 cm in diameter. (B) A cystic tumor was punctured through a supra-pubic working port and the contents of the cyst were aspirated. (C) The tumor was gradually exteriorized. (D) After the identification of a torted pedicle composed of utero-ovarian and infundibulopelvic ligaments (arrow), salpingo-oophorectomy was performed. The precise pathological diagnosis of the excised tumor was difficult due to the severe hemorrhagic necrosis of the cystic tumor wall. The epithelial cells lining the tumor wall were observed to be falling off.

Download English Version:

<https://daneshyari.com/en/article/5689160>

Download Persian Version:

<https://daneshyari.com/article/5689160>

[Daneshyari.com](https://daneshyari.com)