

## Appendiceal Duplication: Malformation Not to Be Overlooked

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DOI: [10.36347/sjmc.2021.v09i01.011](https://doi.org/10.36347/sjmc.2021.v09i01.011)

| Received: 22.12.2020 | Accepted: 06.01.2021 | Published: 14.01.2021

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### Abstract

### Case Report

Appendiceal duplication is a very rare malformation. It is found in children exceptionally in adults. We report a case of a 24-year-old patient who presented to the emergency for acute appendicular syndrome. Diagnosis made with CT scan which showed a duplex vermiform appendix with an enlarged retro caecal appendix and a normal lateral caecal appendix.

**Keywords:** Appendiceal duplication, duplex, vermiform appendix.

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## INTRODUCTION

Appendiceal duplication is an exceptional malformation with a reported incidence of 0.004 [1, 2]. It is found in children exceptionally in adults. It is most often manifests in the first years of life, sometimes certain forms can remain asymptomatic and are only expressed in adulthood [3]. Its discovery is often fortuitous during a radiological sectional examination, a laparotomy or laparoscopy for another pathology.

## OBSERVATION

We report a case of a 24 year old patient, without any particular pathology, who presented to the emergency for acute appendicular syndrome. The biological analyzes showed an infectious syndrome: hyperleukocytosis at 13600/mm and C-reactive protein at 30 mg/l. An abdominal ultrasound done had showed a normal lateral caecal vermiform appendix (Figure-1). Considering the radio-clinical discrepancy we completed with an abdominal CT scan which objectified a duplex vermiform appendix with an

enlarged retro caecal appendix and a normal lateral caecal appendix (Figure-2). The patient underwent a double appendectomy.



**Fig-1: Ultrasound image of a latero-caecal vermiform appendix of normal appearance**



**Fig-2: CT images in coronal (A), axial (B) and sagittal (C) sections: showing Appendiceal duplication; a lateral caecal appendix of normal appearance, and the retro caecal appendix enlarged associated an infiltration of fat around**

## DISCUSSION

The appendiceal duplications are rare malformations and little described in the literature. Fewer than 100 cases have been reported since its first description in 1892 by Picolo [1, 2]. This condition manifests itself most often in the first years of life, but rarely in adulthood. The causes of this anomaly are unclear due to its rarity. The treatment is a double appendectomy by laparoscopy or conventional surgery.

Cave [4] and Wallbridge [5] have classified the duplication of appendix into three types: A. incomplete duplication, in which both appendices have a common base on a single cecum; B. single cecum with two completely separate appendices: B1. bird-like appendix, called so because of its resemblance to the normal arrangement in birds, where there are two appendices symmetrically placed on either side of the ileocecal valve; B2. taenia coli type, one appendix arises from the usual site on the cecum, with other rudimentary appendix arising from the cecum along the line of one the taenia coli; C. two cecum, each bears an appendix.

## CONCLUSION

Although rare, appendiceal duplication is a malformation abnormality that is encountered at an early age and exceptionally in adulthood. Before any acute appendicitis, any surgeon must examine the cecum carefully so as not to miss an duplex vermiform appendix.

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