

# The "Ibadan Intussusception"; now a myth? A 10 year review of adult intestinal obstruction in Ibadan, Nigeria.

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## Summary

Caecocolic intussusception was a significant cause of adult intestinal obstruction in Ibadan where it earned itself the appellation "Ibadan Intussusception".

Recently, it has been noticed that there is a significant drop in the cases of adult intussusception.

A retrospective review of the intra-operative diagnoses of adult patients who presented to the University College Hospital, Ibadan with intestinal obstruction between June 1990 and June 2000 was carried out.

The most common cause of adult intestinal obstruction was obstructed groin hernias followed by adhesions. There was a significant paucity of cases of intussusception, hence the paper queries the veracity of the appellation "Ibadan intussusception" in the present day.

**Keywords:** *Ibadan intussusception now non-existent*

## Résumé

Intussusception Caecocolique était une cause importante de l'obstruction intestinale chez les adultes à Ibadan où on l'appelait communément « Ibadan intussusception ».

Récemment, on avait remarqué qu'il y a une baisse importante dans la cause de l'intussusception adulte. On avait effectué une étude rétrospective d'une diagnostique intra-opératoire des patients adultes qui se sont présentés au Collège Hospitalier universitaire d'Ibadan atteints d'obstruction entre juin 1990 et juin 2000.

La cause la plus fréquente d'obstruction intestinale chez les adultes était hernie aine oblitérée suivie par l'adhésion. On avait noté une pénurie importante des cas d'intussusceptions, en conséquence, cet exposé met en question la véracité d'appellation « Ibadan intussusception » de nos jours.

## Introduction

Intussusception is the invagination of a portion of bowel into another immediately adjacent portion. Usually the proximal to the distal.<sup>1-13</sup> It is one of the known causes of intestinal obstruction. In the past, it was reported to be a common cause of intestinal obstruction in Western Nigeria.<sup>5-8</sup> The clinical pattern of this intussusception was so distinct that it earned itself the sobriquet "Ibadan intussusception;" it was of the caecocolic variety.<sup>8</sup>

Recently, we observed a significant lack of the presence of this entity in our practice and being in the mainstream of surgical care-givers in the designated locality of this clinical entity, we undertook a review of all the cases of intestinal obstruction that presented to the University College Hospital, Ibadan over a 10 years period. The results obtained from this study may not sustain the continued use of the appellation "Ibadan intussusception."

## Material and Methods

Retrospective review of the case-files of all patients who were operated on in the University College Hospital, Ibadan with a diagnosis of intestinal obstruction between June 1990 and June 2000. The age, sex, intra-operative findings were noted and cross-checked in the anaesthesia records, the theatre nurses records and the operative register records to ensure accuracy.

## Results

Eighty-four patients were operated on with intestinal obstruction during that period. There were 46 males and 38 females. M: F = 1.2:1. Age range 15 - 75 years. The mean age was 39.8 years.

Thirty six patients had obstructed hernia. (42.9% of all cases with intestinal obstruction). Groin hernia formed 89% of cases of obstructed hernia (32 cases), from these, right inguinal hernia formed 61% (22 cases), 25% were left inguinal hernia (9 cases) whilst bilateral inguinal hernia made up 3% (1 case). The remaining 11% was made up of Lumbar hernia 3% internal hernia 3% and umbilical hernia 3%.

Obstructed groin hernias on the whole accounted for 38% of cases of intestinal obstruction. Twenty-four patients had adhesive bowel obstruction; 28.6% of total. Caecal pole tumour 7.7% (6 patients), colonic carcinoma 7.1% (6 patients), small bowel volvulus 6% (5 patients), Intussusception 3.6% (3 patients). The varieties of intussusception were ileoileal (2 patients), ileocaecal (1 patient), carcinoma of the rectum 2.4% (2 patients), caecal volvulus due to malrotation 1.2% (1 patient), Gut malrotation with congenital Ladd's band 1.2% (1 patient, a 16 year old male). Indeterminate cases in which the case notes were not found and the diagnoses were not recorded in the operations register, 7.1% (6 patients).

## Discussion

Intussusception is the most common cause of acute intestinal obstruction in infants but this is not the case in adults as many texts will opine.<sup>2,4,4</sup> However in the early 1950's to the late 1960's a particular variety of intussusception was found to be extremely common in Ibadan which was the capital of the Western State of Nigeria as it was known then. This variety was the caecocolic intussusception,<sup>5</sup> and it was shown that at least 40% of intussusceptions occurred in adults and 71.6% of them were caecocolic.<sup>5</sup>

Joly and Thomas in 1954 reported 33 patients seen over a 3-year period with intussusception and noted that it was second only to strangulated groin hernias as the most common surgical emergency.<sup>6</sup>

Graham Cole in 1966 reported 100 patients seen with caecocolic intussusception within 4 years and noted that this entity was confined to adults as infants commonly presented with the ileocaecal variety.<sup>7</sup>

Solanke in 1968 enthused about the exclusivity of this caecocolic variety of intussusception within an "area not greater than 100 miles in the center of the Western State and seen there in numbers greater than those reported elsewhere in the world."<sup>8</sup>

Davey in his textbook probably was the first to coin the appellation "Ibadan intussusception" and also described it as non-infantile idiopathic caecocolic intussusception.<sup>9</sup>

Ajao in 1979 reported 20 cases over a 2 year period and recorded that it 'is a relatively common cause of intestinal obstruction at the University College Hospital Ibadan.<sup>10</sup> Thus an entity so distinct put the city of Ibadan on the intussusception map as a place where caecocolic intussusception is a very common cause of adult intestinal obstruction.

The aetiopathological factors considered for this peculiar disease included ascaris and anthelmintics, (an excretion product of the worm is said to be capable of causing tight contractions of small bowel), fasting and feasting at Mohammedan Ramadan festivals, enlarged ileocaecal lymph nodes associated with viruses, ingestion of plantains which contains 5HT; a smooth muscle stimulant, mo-

bile caecum, amoebiasis and a physiological neuromuscular incoordination<sup>5,6,7,8,9,10,11,12</sup>

Over the past decade, the authors have noted a significant reduction in the cases of adult intussusception; other workers within Nigeria have also reported this trend: Adejuyigbe, Adesunkanmi from Ile-Ife, Elechi from Port Harcourt, Nmadu from Zaria (15 miles, 400 miles and 800 miles from Ibadan respectively) have all reported the significant drop in cases of idiopathic non-infantile caecocolic intussusception.<sup>13,14,15,16</sup>

Adebamowo et al undertook a 20 years review of all intussusception cases from 1975 to 1994 and confirmed the decline in the absolute number of cases of intussusception in both children and adults with the decline more in adults.<sup>17</sup>

Our own findings showed only 3 adult patients in 10 years with intussusception with none of them having the caecocolic variety. (2 patients with ileoileal and one with ileocecal). The most common cause of adult intestinal obstruction being obstructed groin hernias (38%), adhesive bowel obstruction (28.6%) and obstructed large bowel tumours (16.6%). Ajao in 1981 remarked that obstructed inguinal hernia still retains its position as the commonest cause of intestinal obstruction just as it was a decade before.<sup>12</sup> He reported a 35.8% rate which tallies with our 38% rate and also that of Joly and Thomas (1954) of 38.73%.

The reason for this decline is not known since all the considered aetiological factors are still prevalent in Nigeria. Thus there is no denying the fact now that adult intussusception is presently uncommon in Ibadan particularly and Nigeria generally, more so the caecocolic type. For that reason the authors believe that the sobriquet "Ibadan intussusception" may not be appropriate at the present time so that fresh editions of surgical textbooks that may discuss the topic may not make outdated generalizations.

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