

## Corpus Luteum Rupture in a Developing Community

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### Abstract

An important stage in women is the formation of the corpus luteum in the ovary. If all does not go well, there is rupture which necessarily leads to a variable amount of both hidden hemorrhage and perturbing pain. This paper portrays the experiences of both conditions in a developing community - thanks to the utilization of a Regional Pathology Laboratory run by the author from 1970 to 2000. Of the 15 cases, most were between 13 and 30 years; the right side was more often affected and the symptoms were appreciably of short duration. Other parameters such as age were obtained. It is concluded that the old percutaneous needle aspiration should give way to modern techniques.

**Keywords:** Ovary, Corpus luteum, Rupture, Bleeding, Developing community

### Introduction

The "corpus luteum," as defined in Merriam-Webster's Collegiate Dictionary [1], represents an important stage in the mammalian ovary. Incidentally, it is thought to have been first named in 1788. When it ruptures, there is bleeding of a variable quantity with associated perturbing pain [2]. Accordingly, early operation is strongly indicated. Moreover, the variable associated manifestations are open to documentation, especially with reference to epidemiologic parameters.

### Materials and Method

This research was carried out among the Igbos who constitutes a major Ethnic Group in Nigeria. The establishment of a Reference Pathology Laboratory in 1970 made it possible for the author, the pioneer pathologist, to collect the surgical specimens submitted by the local gynecologists who used the available treatment modalities. Accordingly, this work provides a view of the epidemiology of corpus luteum rupture in a typical developing community. It should be useful for comparison worldwide.

### Results

These are portrayed in Table 1.

Serial No	Initials	Age	Parity	Side	Duration (Days)	Size (cm)
1.	CA	14	0	R	2	1.5
2.	AG	25	4	R	1	Frag
3.	EG	13	-	R	1	4
4.	KA	17	-	R	1	Frag
5.	AB	32	3	R	2	2
6.	AI	18	-	R	1	Frag
7.	AL	27	2	L	2	3
8.	UG	17	-	R	1	2
9.	AL	23	-	L	2	4
10.	AR	14	-	R	1	Frag
11.	AN	29	3	R	2	2
12.	EJ	30	2	R	2	4
13.	II	15	-	R	1	4
14.	IN	26	2	L	1	Frag
15.	OC	35	3	L	2	1.5

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"Frag" stands for "Fragments."

## Discussion

It is common knowledge that corpus luteum cysts can rupture and bleed internally; this is a disorder in women in their reproductive age [4]. Curiously, as revealed by Hallatts' group [5], most ruptures occur in the right ovary. This was confirmed with the present cohort.

Naturally, the duration of symptoms must be short in order to save life. The Irish nun, Dr. Deidre Twomey, with whom I have co-authored [6,7], emphasized it this way: "Hospital attendance should be early instead of the patient being brought in dead." Fortunately, the duration here was encouraging.

From India, Anjali's group [8] found that the age range was from 16 to 37 years. Our cohort's range was comparatively 13 to 35 years. In addition, they mentioned that most of their patients were in the age group of 20 to 30 years. The Igbo grouping had exactly the same range.

Ahmed [9] wrote from England; his series included a girl aged 14 years. Following oophorectomy, "She made an uneventful recovery." This reminds me that such "uneventful" recovery is repeatedly used all over the world because of the "lingua franca" status of the English Language [10]. It must be confessed that, in this developing community, what I personally practiced as a house surgeon back in 1958 is still largely in vogue in terms of percutaneous needle aspiration.

Nowadays, the emphasis has shifted. For example, Fiaschetti [11] and her associates wrote in terms of Ultrasound Study being "usually the first imaging technique for initial evaluation." They also added contrast-enhanced computed tomography. No doubt, future experiences in this community will follow such advanced techniques.

## Conclusion

The findings of this study revealed that Igbo women suffer from corpus luteum hemorrhage as in other parts of the world. As elsewhere, the right ovary was mostly involved. Health education is necessary so that patients attend for treatment in time instead of being brought in dead. The new investigation methods should be used in diagnosis instead of time worn percutaneous needle aspiration.

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