# Rome IV Diagnostic Criteria for Irritable Bowel Syndrome in polycystic ovary syndrome patients

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DOI: https://doi.org/10.26800/LV-142-supp5-35

## Introduction:

Polycystic ovary syndrome (PCOS) is a complex endocrinopathy affecting 4-21% of women worldwide. PCOS patients may present with gastrointestinal (GI) disturbances more often than healthy women. Irritable Bowel Syndrome (IBS) is a functional GI system disorder affecting 10-20% of the general population. Research shows that young females are most severely affected by IBS. Links between these conditions have received limited attention in research thus far.

#### Aim:

To assess IBS prevalence based on the Rome IV diagnostic criteria in PCOS patient population and compare findings with anthropometric, biochemical, hormonal, and QoL data.

### Materials and Methods:

Participants included 133 PCOS patients and 72 age- and BMI-matched healthy women. PCOS diagnosis was based on the Rotterdam criteria. The 2016 Rome IV IBS criteria were used. Metabolic syndrome (MS) presence was evaluated with the current International Diabetes Federation criteria. Depressive symptoms were assessed using the Center for Epidemiologic Studies Depression Scale - Revised (CESD-R) and participants' health-related QoL with the 15D instrument.

## **Results:**

IBS prevalence was 24% in PCOS vs. 21% in controls (p=0.60). Among PCOS patients, 6.02% had previously diagnosed IBS compared to 8.06% of controls (p=0.60). There was no significant difference between depressive symptoms occurrence in PCOS+IBS (4.17%) vs. PCOS-only (4%). QoL appeared to be significantly lower in PCOS+IBS patients vs. PCOS-only. Simple obesity, visceral obesity, and hyperandrogenism did not influence IBS prevalence in PCOS patients. Alarm symptoms were more common in the PCOS group vs. controls. MS was more prevalent in IBS+PCOS vs. PCOS-only subjects.

## **Conclusion:**

There seem to be no significant differences between IBS occurrence in PCOS vs. healthy women. Obesity, hyperandrogenism, biochemical-hormonal disturbances seem not to affect IBS prevalence in PCOS. IBS screening is advised in PCOS patients due to its potential negative impact on QoL.

**Keywords:** Irritable Bowel Syndrome (IBS); Rome IV (Diagnostic) Criteria; polycystic ovary syndrome (PCOS)