

Internal Medicine Complications of Undiagnosed PCOS

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Background: Polycystic Ovary Syndrome (PCOS) is a common endocrine disorder affecting 6–26% of reproductive-aged women. It is significantly underdiagnosed, with an estimated 70% of cases worldwide remaining undetected. This lack of diagnosis leaves the core pathophysiological causes (insulin resistance, hyperandrogenism, and chronic inflammation) untreated, leading to serious multisystem complications.

Aim and Objectives: This review aims to illustrate the significant long-term internal medicine complications arising from undiagnosed PCOS. Its objective is to highlight the profound metabolic, cardiovascular, oncological, reproductive, and psychological morbidity associated with the syndrome to emphasize the critical need for early recognition and intervention.

Methods: A comprehensive review of current scientific literature was conducted. Databases such as PubMed and Scopus were searched for relevant studies and meta-analyses concerning the epidemiology, pathophysiology, and long-term health outcomes of polycystic ovary syndrome.

Results: Undiagnosed PCOS precipitates a substantial health burden across multiple domains. Key complications include: (1)

Metabolic Dysregulation: A 2-3 times higher risk of type 2 diabetes and metabolic syndrome, driven by insulin resistance affecting up to 70% of patients. (2) **Cardiovascular Disease (CVD):** A 30-50% increased incidence of hypertension, atherosclerosis, and stroke, often presenting 3-4 years earlier. (3) **Reproductive & Oncological Sequelae:** A significantly elevated risk of endometrial cancer and a three-fold higher prevalence of pregnancy complications, including gestational diabetes and preeclampsia. (4) **Psychological & Systemic Burden:** Higher rates of depression, anxiety, eating disorders, obstructive sleep apnea, and liver disease.

Conclusions: Undiagnosed PCOS represents a major public health gap, contributing to lifelong morbidity and significant healthcare costs, estimated at ~\$4 billion annually in the U.S. alone. Reducing this burden necessitates enhanced clinician education, standardized screening using established criteria, and prompt, interdisciplinary management focused on early lifestyle and medical interventions.

Keywords: Polycystic Ovary Syndrome, Insulin Resistance, Cardiovascular Diseases, Endometrial Cancer, Metabolic Syndrome, Delayed Diagnosis.