Editor's Comment:

The presented study is an overview of recent advances in the treatment of emphysematous pyelonephritis (EPN), from early diagnosis to current therapeutic approaches, and to identify areas for future research and innovation. EPN is a life-threatening infection characterized by gas formation in the renal tissues, often associated with diabetes and immunodeficiency states. This article discusses various imaging modalities for the diagnosis and treatment of this disease. The authors conclude that imaging, especially CT (computed tomography), plays a crucial role in the classification and treatment of EPN, with minimally invasive techniques such as percutaneous drainage emerging as effective interventions. Medical treatment, including strict glycemic control and targeted antibiotics, has reduced the need for nephrectomy in cases of low-grade EPN. The transition from traditional radiographs to advanced cross-sectional imaging has allowed more accurate determination of the extent of infection and gas collection, reflected in images showing gas in the renal parenchyma. This topic is of great importance since detailed data on emphysematous pyelonephritis are lacking. The manuscript is ready for publication since its importance is aimed at providing early diagnosis, minimally invasive interventions and antibiotic treatment of EPN.

Editor's Details:

Dr. Elvira Bormusov (Retd.)
Retired Professor, The Lloyd Rigler Sleep Apnea Research Laboratory, Israel.