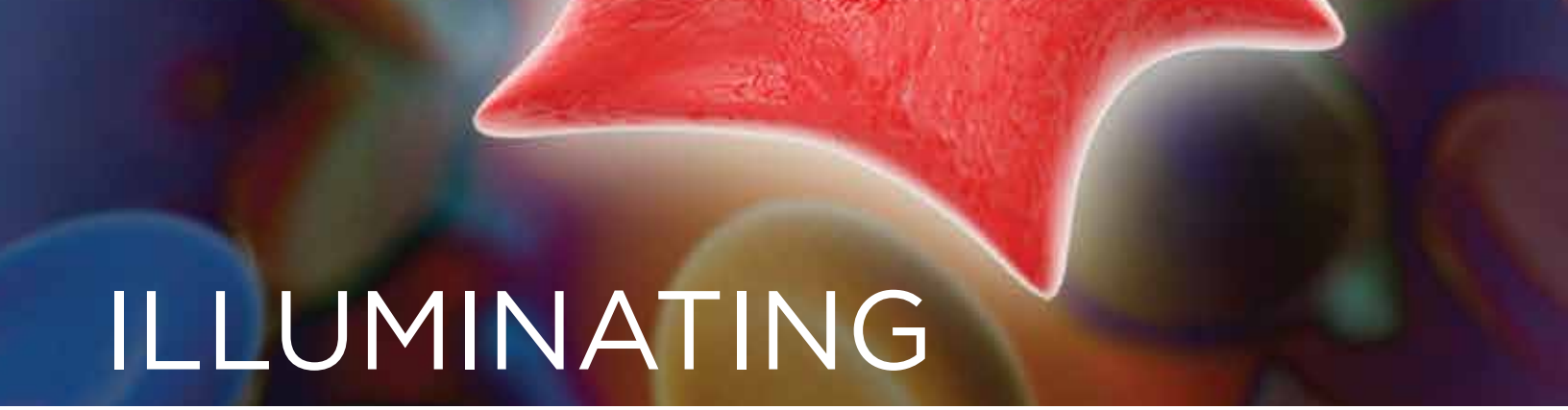

ILLUMINATING

AN UNDERLYING CAUSE OF HEMOLYTIC ANEMIA

About PK Deficiency

OVERVIEW

PK deficiency is a lifelong, chronic disease characterized by hereditary hemolytic anemia, which results from a deficiency of the enzyme pyruvate kinase (PK).

- Patient presentation is highly variable, ranging from mild to life-threatening, with severe debilitating co-morbidities.[1,2]

PK deficiency is the most common glycolytic defect causing hereditary nonspherocytic hemolytic anemia,[1,3] yet may be underrecognized, particularly in adults and patients on the milder end of the spectrum of disease severity.[2]

PATIENT IDENTIFICATION

PK deficiency should be considered in patients with hemolysis and no findings suggestive of an acquired autoimmune process, red cell membrane defect, or hemoglobinopathy.[3]

Findings among PK-deficient patients may include:

- Anemia
- Fatigue
- Jaundice
- Splenomegaly
- Gallstones
- Iron overload

TREATMENT/MANAGEMENT

Current treatment is supportive and not disease-specific, and can include:

- Transfusion therapy
- Splenectomy
- Gall bladder removal (cholecystectomy)
- Iron chelation

Quick Facts

- Pyruvate kinase (PK) is a critical enzyme for maintaining red blood cell energy levels
- PK deficiency leads to decreased ATP and a shortened red cell lifespan
- Can be under- and misdiagnosed

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ILLUMINATING PK DEFICIENCY

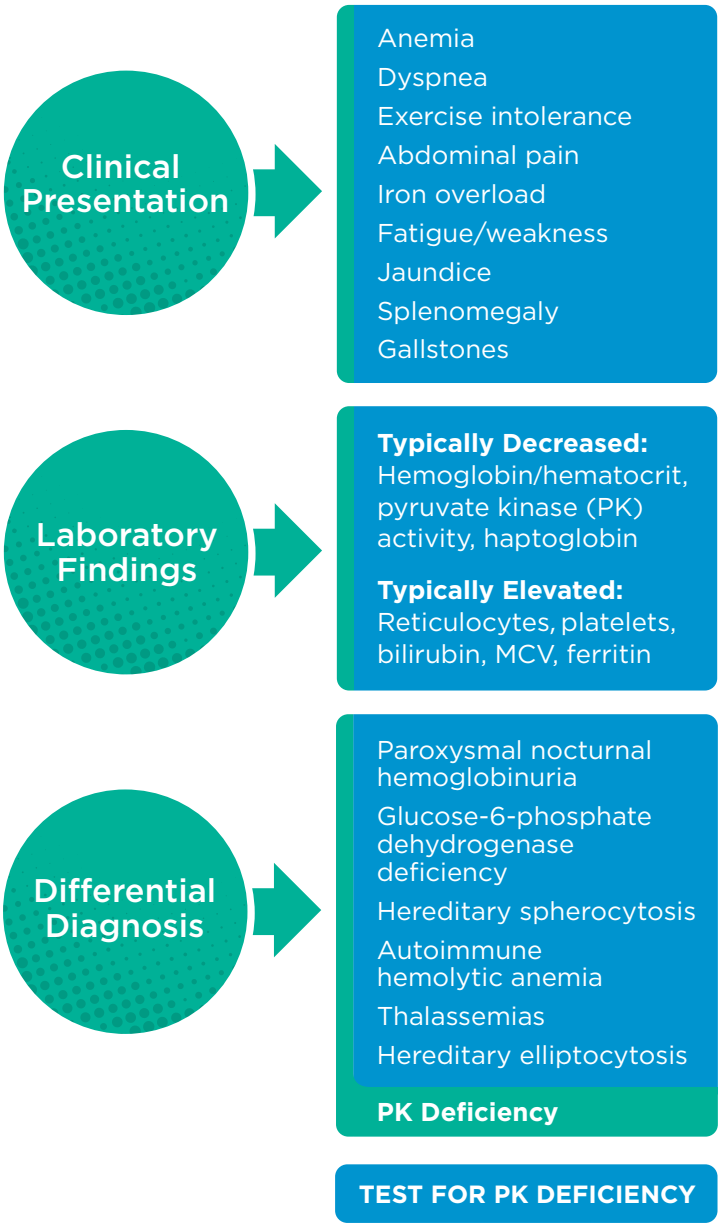
DIAGNOSIS

Enzyme assay (simple blood test) for pyruvate kinase activity should be conducted when PK deficiency is suspected.

PATIENT IMPACT

- Patient presentation ranges from mild to life-threatening[1,2]
- Patients on the milder end of the spectrum may go years without a diagnosis[2]
- Fatigue, lethargy, and weakness may have a large impact on daily activity and quality of life

Proper patient identification and diagnosis are taking on new importance.



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