

Preeclampsia Assessment

Preeclampsia is a systemic disease characterized by hypertension that is accompanied with proteinuria after the 20th week of gestation. If left untreated, preeclampsia can lead to serious, and even fatal, complications. Risk factors include nulliparity, age younger than 18 or older than 40, obesity, multifetal gestation, positive family history, preexisting hypertension or renal disease, and diabetes mellitus.



PLAY PICMONIC

After 20 Weeks of Pregnancy

(20) Twenty-dollar Pregnant-woman

Preeclampsia usually begins after the 20th week of gestation; however, it can appear at any time during pregnancy. It occurs most frequently in the final trimester.

Mild

Hypertension > 140/90

Hiker-BP Greater-than 140/90

Mild preeclampsia includes an elevated blood pressure of 140/90 taken on two separate readings at least four to six hours apart.

Proteinuria or End-Organ Dysfunction

Mr. Protein-urinal and Organs Dysfunctioning

A dipstick reading of 1+ or 2+ indicating protein in the urine confirms mild preeclampsia. Due to elevated blood pressure, patients can develop other endorgan dysfunction as well, including headache, vision disturbances, dyspnea, abdominal pain, edema and altered mental status.

Severe

Hypertension > 160/110

Hiker-BP Above 160/110

 $Severe\ preeclampsia\ includes\ an\ elevated\ blood\ pressure\ of\ 160/110\ taken\ on\ two\ separate\ readings\ within\ six\ hours.$

Progressive Renal Insufficiency

Kidney Progressively Dying

In severe preeclampsia, patients develop progressive renal insufficiency. This is defined as a serum creatinine concentration greater than 1.1~mg/dL, or a doubling of the serum creatinine concentration in the absence of other renal disease.

Vision Changes

Delta Eyes

Blurry vision, double vision, photophobia, or scotomas may occur as a result of retinal arterial spasms.

HELLP Syndrome

Calling for HELLP

HELLP syndrome (hemolysis, elevated liver enzymes, and low platelets) is a life-threatening condition likely representing a severe form of preeclampsia, though the etiology remains unclear. It presents with more drastic symptoms and signs of liver inflammation. Patients may complain of epigastric pain or right upper quadrant pain, persistent headache, and blurred vision; symptoms that often precede eclampsia-related convulsions.



Pulmonary Edema

Lungs Edamame

As a complication of hypertension in this disease, patients can develop pulmonary edema. This occurs as a result of increased afterload in the heart, pushing fluid into the lungs.