

PtcO₂ Decision Tree

Define level of suspected hypoxia
Identify unsuspected hypoxia

PtcO₂ >40mmHg, no significant baseline hypoxia

PtcO₂ <40mmHg, clinical significant hypoxia

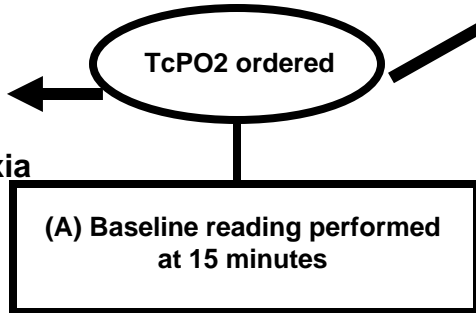
The lower the value below 40mmHg the more significant the degree of hypoxia

Differentiate diabetics from non diabetics?

might consider critical qualifying value of 30mmHg (in non diabetics)

Lower extremity wound
Diabetes
History c/w risk for PVD
Physical findings c/w PVD

Baseline with patient supine or semi-recumbent



TcPO₂ < 40mmHg

Yes

(B) Oxygen challenge test performed 10 minutes

Performed to differentiate PVD from edema, assess potential to respond to HBO, quality of runoff re success of possible revascularization

Ischemic rest pain
Claudication
Abnormal pulse exam
Prior vascular surgery

The higher the PO₂ value the more likely a therapeutic response to HBO will occur

> 200 mmHg is a good response
100 - 200 mmHg is an adequate response, mild to mod ischemia
51 - 99 mmHg a borderline response, significant ischemia,
0 - 50 mmHg demonstrates high grade ischemia

PtcO₂ during HBO is best predictor of Positive response to HBO:

PtcO₂ >400mmHg in diabetics has best correlation with positive response

PtcO₂ <400 >200mmHg will include more failures,

PtcO₂ <200mmHg unlikely to produce positive response

Large vessel disease suspected

No

Yes

(C) Physiologic challenge test—Leg elevation performed 15 minutes

Test Over

>20% drop on elevation from air baseline = significant PVD