HBOT affects on free-radicals

Here are my notes from Dr Rossignal from the University of Virginia Medical School concerning free radicals...

- HBOT causes an upregulation in anti-oxidant enzymes including superoxide dismutase, glutathione peroxidase, catalase, heme-oxygenase, and paraoxonase
- While you may get a small increase in free radical production while you are in the HBOT chamber, the elevation in anti-oxidant enzyme levels more than adequately compensates for this.
- In typical people, pressures under 2.0 are not associated with oxidative stress. In autistic children, (who are under much more oxidative stress than typical children), there is a chance that oxidative stress could happen with HBOT, so markers of oxidative stress in autistic children were measured up to 1.5 atm and 100% oxygen and found that while plasma glutathione levels dropped slightly, there was no evidence of increased oxidative stress inside the cells.
- In animal studies, treatment with antioxidants (Vitamin C, melatonin, glutathione, NAC, etc.) prevented oxidative stress from HBOT at 4.0 atm and 100% oxygen.

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