

Can Hyperbaric Oxygen Therapy Treat Severe Addiction?

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[Hyperbaric Oxygen Therapy](#) (HBOT) has had a controversial history. The use of high-pressure oxygen in specialized environmental tanks has been invaluable in treating pathological conditions such as decompression sickness, air embolisms, gas gangrene, and carbon monoxide poisoning. Despite this success, use of HBOT in treating more unconventional ailments such as autism, cerebral palsy, hearing loss, traumatic brain injury and multiple sclerosis remain less proven however. As well, medical complications relating to potential misuse of HBOT including potential pressure damage to various organs of the body (including possible optical neuritis) have been cause for concern in the clinical literature. Despite these drawbacks, the potential for HBOT in treating other, potentially devastating diseases continues to be explored.

One intriguing new avenue of research is currently underway at [Castle Craig Hospital](#) near Edinburgh, Scotland. A prominent centre for the treatment and rehabilitation of addiction, the hospital has introduced the use of HBOT in treating severe substance abuse. The program was introduced by Peter McCann, chairman of Castle Craig, based on research determining the benefit of HBOT in [Korsakoff's Syndrome](#) patients (typically alcoholics). Given that severe alcoholism often leads to loss of brain function relating to cell death, use of HBOT to accelerate brain recovery, in conjunction with cognitive remediation programs, has shown remarkable benefit in treating addicts disabled by years of substance abuse.

After patients are referred to the hospital by the National Health Service, they receive a comprehensive assessment and placement in appropriate treatment which can include detoxification, group and individual therapy, as well as education. HBOT at the hospital typically involves hourly sessions in the hyperbaric chamber in conjunction with more established treatment regimens. Although health authorities in the NHS remain unconvinced as to the potential of HBOT in treating addiction, researchers at the University of Edinburgh are investigating the benefit of high-pressure oxygen therapy in treating alcohol-related liver damage in chronic alcoholics. Clinicians at the hospital are also reporting positive benefits of HBOT in treating symptoms of posttraumatic stress disorder although little research in the area has been published to date

While preliminary research has shown that HBOT [is potentially beneficial in drug detoxification and abstinence](#) , the potential value of this form of treatment in dealing with the devastating consequences of long-term substance abuse is still open to question. Given the economic burden that chronic alcoholics place on public health systems around the world, it is certainly hoped that this type of treatment is more than hot air.