

The Clinical Role of Hyperbaric Oxygen Therapy in the 21st Century*Bennett M**University of New South Wales, Australia***Introduction**

The history of hyperbaric medicine has been a difficult one. From origins in the 19th century “wellness” industry – where hyperbaric air spas were common throughout Europe and North America - through the enthusiasm of early pioneers who suggested hyperbaric oxygen therapy (HBOT) could cure a wide range of conditions, to the modern, evidence based approach, it has been a colourful journey. This presentation will put modern HBOT into its historical context and outline the likely future for this therapy.

The Modern Context:

In 1973, the Undersea and Hyperbaric Medical Society (UHMS), facing increasing pressure from funders and physicians outside the field, made the first serious attempt to examine the evidence base for common indications. From a list of more than 170 conditions examined, sufficient clinical and experimental evidence could be found to support the routine use of HBOT in only 13. Since then, few new conditions have been added to this list. The latter two decades of the 20th century and the first years of the 21st century have been ones of consolidation and rationalisation. The field has increasingly been forced to confront a patchy evidence basis and several modestly powered randomised controlled trials have re-examined all of the “traditional” indications with mixed results. Hyperbaric physicians have only recently come to a full understanding of the requirements for acceptance into the contemporary therapeutic arsenal. The primary challenge remains the full integration of HBOT services into the modern medical system in a rational manner that efficiently utilises a relatively costly resource.

Summary

The opportunity in the 21st century is to use both sound clinical and mechanistic arguments to persuade colleagues of the place of HBOT in their own areas. It is important to encourage participation of a broad range of specialties within the hyperbaric service in order to achieve this goal.