



The use of Benzodiazepines as tranquilisers in freediving

The serious risks for Health - A real doping practice

By DR Michel Leglise

Benzodiazepines are a class of drug substances that impact the brain and some other areas of the central nervous system to reduce their excessive activity - We can reference about 50 generics and 100 different brands around the world.

They can be classified into 3 groups according to the time of elimination from the body (said half-life): fast - medium – low elimination. (Few hours till several days) and according to their most particular effects on the brain and nervous system.

Among but not limited to : alprazolam (Xanax) – chlordiazepoxide (Librium)- clorazepate (Tranxene) – diazepam (Valium) – lorazepam(Ativan)
Oxazepam (Serax)- Triazolam (Halcion) etc etc.

All the BZD are classified by the health department of most of the national countries in specific categories as risk substances mainly in case of abuse – misuse of their normal medical use, possibly huge risks in certain associations with other medications – association with alcoholalso grapefruit + and specific personal contraindications – but also even in normal use when not respecting the prescription...

These are very useful medications but must be only used for treatment under a medical prescription and never turned from that use as ex for sports practice... that can be an aggravating factor of risk and source of severe accidents according to the specificity of each discipline environment and constraints...

The normal use is limited to reducing anxiety chronic or seizures - panic disorder - inducing relaxation and sleep and anaesthesia for surgery - muscle relaxation - alcohol withdrawal treatment - in the frame of common daily social life.

The use of BZD is NEVER innocuous as can make believe its large use and overuse worldwide - Many serious (even lethal) accidents are reported when the correct use is not respected.



The frequent and common side effects are sleepiness, dizziness, drowsiness, anterograde amnesia, hangover effects in the following days, adverse effects in cognition and also, hypotension, cardiac arrhythmias, slow heart rate nausea, respiratory depression, apnea, blurred vision.

The main recommendation is not to use these products using or driving machines and accomplish some dangerous gestures and performances, mainly at work and during sports practice when total discernment and mastering of the situation and full efficiency of the cardiovascular and respiratory systems are needed.

We can be very worried when BZD are used to facilitate sports practice and performance in or out of competition.

We firstly think about the Freediving disciplines... the sides effects can induce profound and dangerous sedation, reduction or loss of consciousness, heart and respiratory depression, even coma, and in all cases, insidious and durable loss of cognition (in a severe accident, a specific antidote in Intravenous must be delivered in a huge emergency on site that is no easy according to the specific environment in deep water...).

This a very risky practice, often not always really felt by the athlete but insidiously dangerous for health in a short, medium, or long term.

It is also totally unfair as assimilated into a doping practice to enhance performance. There are absolute reasons to use benzodiazepines ONLY for strict, duly evaluated medical reasons. This is also an occasion to remember that no doping strategy has a place in the CMAS family.

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