INTERACTIONS BETWEEN MEDICINAL GASES AND OTHER MEDICINAL PRODUCTS:
DEVELOPMENT OF A HOSPITAL DRUG DATABASE

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Methods

Review of the summary of product characteristics (SPC) of all medicinal gases currently available in Portugal and consultation with the manufacturers of medicinal gases and analysis of responses. A literature review was also performed, through research and analysis of articles obtained from PubMed published since January 2007 to September 2012, intersecting the terms “medicinal gases” and “medical gases”.

Results

A total of 6 medicinal gases currently available in Portugal were analyzed: medicinal air, nitric oxide, nitrous oxide, nitrous oxide/oxygen, oxygen and xenon. The main interactions of these gases with other medicinal products are described below.

Discussion/Conclusions

The prescription of medicinal gases by healthcare professionals requires the same pharmacotherapeutic monitoring commitment and pharmacovigilance as other drugs, in order to promote rational use of medicines and patient welfare.

There is a panoply of drugs that interact with medicinal gases and a number of mechanisms that explain these interactions which can be beneficial or pejorative. There are also essential and appropriate measures to be taken to prevent major side effects.

The produced database is a valuable tool for Portuguese hospital pharmacists that dispense medicinal gases, contributing to validate prescriptions of these medicines quickly and effectively.

References


Conflicts of Interest: Nothing to disclose.