

HOW HOSPITAL PHARMACIST CAN PROMOTE PROPER USE OF BREATH TESTS BEYOND BUYING MEDICAL DEVICES?

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Introduction

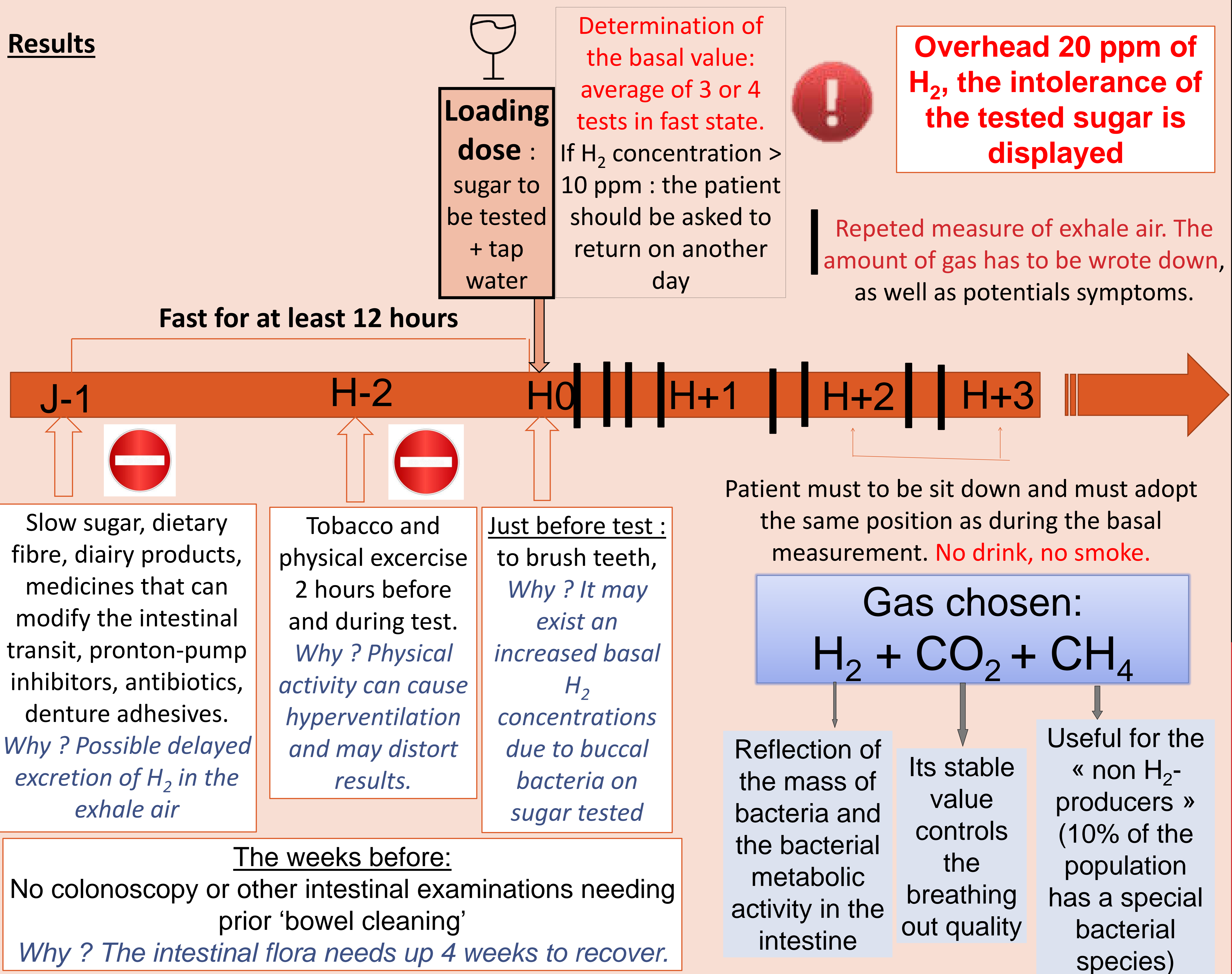
- **Carbohydrates malabsorption** and **Small Intestinal Bacterial Overgrowth (SIBO)** cause digestive symptoms that can affect patients' quality of life.
- The hydrogen breath test is the most widely used diagnostic method.
- Anaerobic bacteria colonizing the large intestine, or the small one in pathologic situations, product **hydrogen** by fermentation of non-absorbed carbohydrates which can be **measured in breath**.
- The lack of standardization of measurement and interpretation of this test can lead to misclassification.

Purpose : To assess breath tests procedures used in our establishment to identify possible problems and improve practices.

Material and methods

- Inventory of breath test practices (**in red in the text = done in our hospital**) in our gastro-enterology department
- Comparaison with literature data (Pubmed : "breath test", "carbohydrates malabsorption", "SIBO", since 2004)
- Comparaison with recommendations made by manufacturers on the French market.

Results



Conclusion & action

- To do a **protocol** for physicians with lifestyle advices (before exam and measurement rules) to **improve quality** of breath tests.
- To buy a medical device to measure **hydrogen, CO₂** and **CH₄**.
- **To relocate the analysis** in the Biology department: to **standardize** measurement of gas, calibration and maintenance. The interpretation remains made by gastro-enterologists (diagnosis precision).
- To open **accessibility** to town doctors (diagnosis development).