

SUPPLY DIFFICULTIES IN OXYGEN HUMIDIFIERS: AN OPPORTUNITY TO PROMOTE GOOD PRACTICE

Margaux Dufossé¹, Claire Andejak², Abir Petit¹

¹ Pharmacie à Usage Intérieur, CHU Amiens-Picardie, 1 rond-point du Pr Christian Cabrol, 80054, Amiens, France

² Service de pneumologie, CHU Amiens-Picardie, 1 rond-point du Pr Christian Cabrol, 80054, Amiens, France

What was done ?

To promote good use of oxygen humidifiers and control our consumption in a context of shortage we have drawn up a scientific explanatory document, a procedure and a prescription support.

Why was it done ?

May 2022 : sale discontinuation of oxygen humidifiers from one of the two manufacturers in our country, due to the constraints of MDR 2017/745. The other one reserves its products to hospitals with marketing partnerships.

We had to define indications and prescriptions to control consumption in our hospital.

How was it done ?

Working group : pharmacists, resuscitators, pulmonologists and nurses + scientific literature and respiratory medicine learned societies' recommendations

- Suppression of services' allocations for humidifiers & **New prescription sheet (Figure 1)**
- **Good use & explanatory document** : high-priority medical indications, recommendations, risk-benefit balance, circuit's montage

What has been achieved ?

Restricted indications

- Paediatric patients,
- Patient with tracheotomy
- Patients with oxygen flow rate above 5L/min AND
 - Upper respiratory tract lesions such as nose bleeding,
 - Or nasal discharge congestion,
 - Or nasal mucosa's irritation or lesions.

What's next ?

This **collaborative and multidisciplinary work** enabled to change practices. Supply difficulties, initially seen as challenging, are a **great opportunity to promote good use**, and **secure patient care**. Although they have now been resolved, with a new supplier, **we maintain our measures to ensure patients' security and well-being**.

CHU AMIENS PICARDIE		ORDONNANCE DISPOSITIFS MEDICAUX	
		Validée le XX/XX/XX par le COMEDIMS v1.0	
SERVICE :	DATE :	Patient's ID	
PRESCRIPTEUR	NOM :	Prescription details : department, date, prescriber	
FONCTION :			
Ordonnance d'humidificateur d'oxygène (AQUAPAK®/RESPIFLO®)			
MD description		A FAXER au 87155	
DESCRIPTIF PRODUIT : Un humidificateur se compose d'un flacon d'eau stérile et d'un adaptateur, et se branche entre la sortie d'oxygène et le dispositif d'administration d'oxygène bas débit (masque simple, venturi ou haute concentration). Il humidifie les gaz respiratoires, et donc des voies aériennes, pour les préserver d'un assèchement inconfortable. Il se branche entre la sortie oxygène et le masque.			
NOM COMMERCIAL (et référence):			
<input type="checkbox"/> RESPIFLO® (MEDTRONIC) 345mL (ref. 2221F) Code pharmacie 773026 <input type="checkbox"/> RESPIFLO® (MEDTRONIC) 500mL (ref. 2510F) Code pharmacie 709841 <input type="checkbox"/> AQUAPAK® (MEDLINE) 340mL (ref. 003-40E) Code pharmacie 709620 <input type="checkbox"/> AQUAPAK® (MEDLINE) 650mL (ref. 0			
❖ OXYGENATION AU MASQUE		Patient with oxygen flow rate above 5L/min	
<input type="checkbox"/> Débit ≥ 5L/min et : <input type="checkbox"/> Muqueuse nasale ou buccale irritée <input type="checkbox"/> Congestion des écoulements <input type="checkbox"/> Epistaxis		<ul style="list-style-type: none"> • and upper respiratory tract lesions such as nose bleeding, • nasal discharge congestion, • or nasal mucosa's irritation or lesions 	
❖ OXYGENATION VIA CATHETER TRANS-TRACHEAL		Patient with tracheotomy	
<input type="checkbox"/> Tous débits			
❖ OXYGENATION POUR PATIENT DE REANIMATION NEONATOLOGIE		Paediatric patient	
<input type="checkbox"/> Tous Débits			
Dans les situations suivantes, les humidificateurs ne sont pas indiqués			
<ul style="list-style-type: none"> • Patient en air ambiant • Patient sous lunette à oxygène • Patient oxygéné au masque avec débit < 5L/min 			
NB : l'humidificateur doit être changé une fois par mois s'il est utilisé en continu.			
SIGNATURE :			

Figure 1 : Oxygen humidifier prescription

Mean consumption before the new procedure:
1415 units per month

Mean consumption with the new procedure :
39 units per month

12 (8.7%) out of 138 prescriptions were denied:

- 6 patients on ambient air,
- 4 with nasal cannula,
- 1 without any severity criteria
- 1 not nominative prescription

