

PAP Mask Interface

Clinician's Perspective

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PAP interface – probably most important factor in compliance

- Patient has to accept the mask
- Patient has to tolerate the mask
- Patient has to clean and maintain mask

PAP masks

How many masks are available

- 70 different types
 - Full Face – 14
 - Nasal mask – 31
 - Pillows – 20
 - Hybrid – 2
 - Whole Face – 1
 - Oral – 1
 - No Mask - 1

Why so many different masks

Factors affecting Mask acceptance and tolerance

- Sleep Lab
- HME
- Mask
- Patient

Sleep Lab Factors

- Patient Education
- Mask availability – what's in stock
- Technician's preference
- Mask Fitting by Sleep Lab Staff
- Pressure requirements

First Mask tried and used in Sleep Lab is often not the final mask that patient uses

HME Factors

- Patient Education
- Mask availability – what's in stock (usually can order if not in stock)
- Mask fitting
 - Sitting / laying
 - Trial at full pressure
 - In store / patient's house
- Only one mask at a time
- Exchange/swap policy

- First prescribed mask may not be used in future

TRUE or FALSE

Mask Leaks occur only when mask is too loose and not when it is too tight

- Mask should be as loose as possible while still creating a seal.
- Too tight mask against face can cause leaks by creating folds in the material

Mask Factors

- Area covered
 - Nasal
 - Nasal pillows
 - Oro-nasal (Hybrid)
 - Full face
 - Whole face
- Cushion material
 - Silicone
 - Foam insert
 - Gel
 - cloth
- Sizes available
- Headgear – yes or no; tightness
- Chin strap
- Exhale Holes direction
- Forehead cushion

Mask: covered area: Nasal



Mask Covered Area: Full face



Mask: covered Area



Forehead Cushion



Forehead Cushion



Nasal / Full face masks with no forehead piece



Forehead support angle adjustment



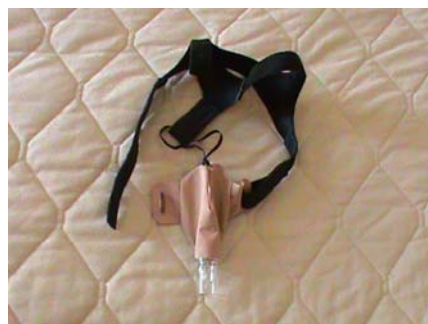
Forehead support angle adjustment



Mask: cushion material

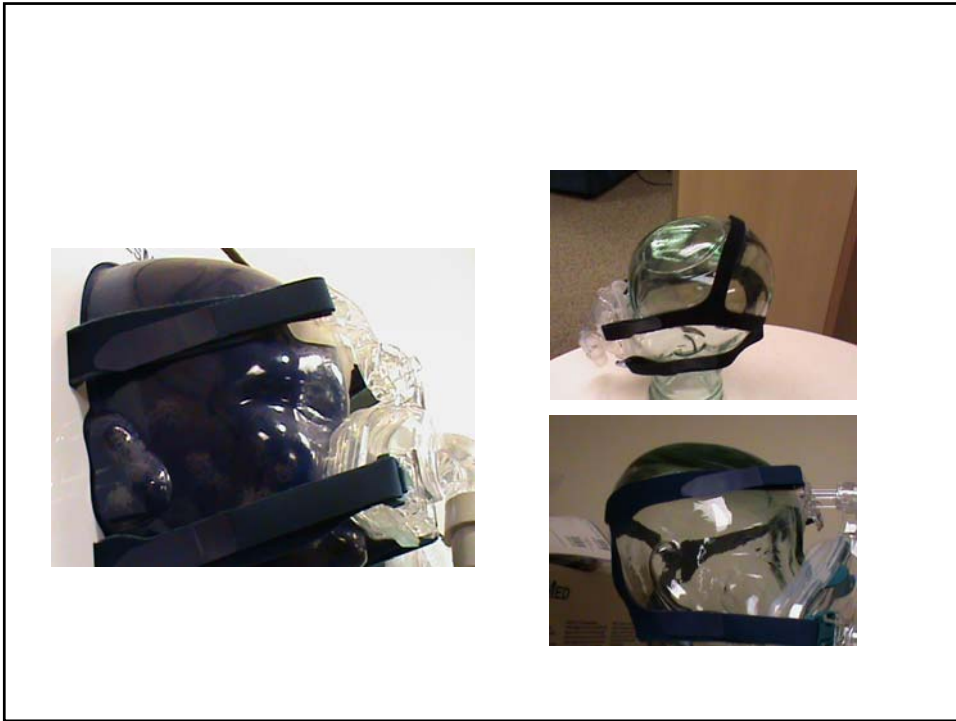


Mask: cushion material



Headgear: shapes





Mask: Special Feature



Patient Factors

- Acceptance of Disease
- Severity of Disease
- Symptomatic versus asymptomatic
- Claustrophobia
- Mouth Breather
- Active Sleeper
- Several bathroom trips in night
- TV friendly
- Ease of putting it on and off
- Patient with disability – arthritis, stroke
- Facial characters
 - Shape – small / wide / narrow
 - Facial Hair

Bedroom Factors

- Bed Partner
 - Noise – due to leaks
 - Anxiety
 - Air blowing via exhalation ports
- Pets

Physician Factors

- Physician's knowledge of different masks
- Sleep specialist versus non sleep specialists

Issues with Masks

- Leaks
 - Around mask
 - Around bridge of nose
- Bruise
 - Bridge of nose
 - Around mask
- Upper lip hurts
- Claustrophobia
- Air Blows on Bed Partner
- Puffiness of eyes
- Sore throat
- Don't like headgear – messes up with hair
- Strap marks on face in morning

Ideal Mask Fit

How best to achieve best fit so compliance can improve

- In Sleep Lab
- By HME staff

Mask Fitting in Sleep Lab

- Empower patients to select mask
- Try several masks
- Let patient be in control
- During trial, let patient sleep in different positions, move around in bed, try to mimic similar to home
- Ask patient to adjust mask, straps and feel comfortable with handling mask

Mask Fitting by HME staff

- Must do in laying down position – on back and turn on to sides as well
- Try several masks (have patients touch and feel several masks and apply to face before settling on one mask)
- If possible, give patient several masks (one prescribed and few similar) and have patient try masks over several nights
- Let patients have control over mask selection
- Have patient put it on and take it off themselves and show to staff
- Encourage patients to make adjustments to headgear straps, forehead arm adjustment
- Assess patient factors:
 - Sleep position
 - Bathroom trips
 - Arthritis / disability
 - Bed room environment – partner, pets

Dry / Sore throat

- Can be very painful
- Usually due to mouth breathing

- Chin strap with Nasal Mask
- Full Face Mask
- Heated Humidifier

Mask Leak

- Caused by masks that are too big, too old, or wrong style
- Causes arousals, sleep fragmentation
- Annoying, leads to poor compliance

- Adjust mask, straps
- Make sure size is proper
- Different type of mask

Sore spots on nose, forehead, face

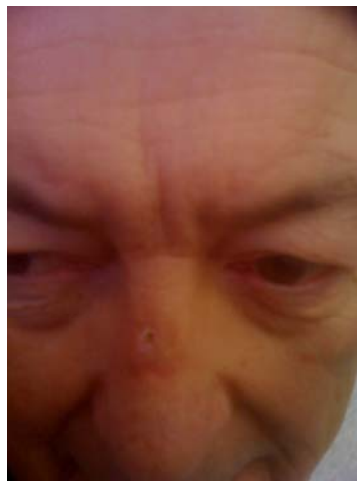
- Annoying
- May cause skin breakdown
- Poor compliance

- Loosen straps (but not to start air leak)
 - Adjustment of forehead arm (not in all masks)
 - Readjust headgear straps
- Pads that slip over straps
- Barriers between mask and skin
- Different type of mask

Claustrophobic

- Gets panicky
- Deconditioning
 - Wear mask without PAP for few hours while awake
 - Wear mask with PAP for few hours while awake
 - Wear mask w/ PAP while sleeping
 - Hypnotics with PAP

Sore on bridge of nose



DME Survey regarding mask

- Sent to 20 companies
- NW Ohio and SE Michigan
- 12 replied

DME survey

- Mask Provided to patient
 - Most provided mask as specified in initial order and did refitting to ensure proper fit
 - 1 – give another mask (if original mask not in stock)
 - None – give another mask as ordered mask is not proepr fit

- If patient cannot tolerate mask within 1 month
 - Most will exchange mask – same kind (like full face mask) from different manufacturer or different type of mask (nasal, full fac or pillow) from same manufacturer)

- How many different masks given to patient at one time
 - 1 only - 10
 - 2-3 – occasionally 3
 - >3 – 1 (if mask fitting is ordered)
- If patient complains of poor tolerance after 2 months
 - Everyone will give demo/sample mask till patient is satisfied

- How many demo /sample mask do you have in store
 - None - 2
 - 1-25 - 6
 - 26-50 - 0
 - >51 - 4

- Mask Fitting
 - Store -10 (4 only in store)
 - Home –8 (2 only in home)
 - Sitting – 10 (5 sitting only)
 - Laying - 6
 - Full Pressure - 12

Mask Accessory: REMZZ

