How to choose a cushion for a wheelchair...

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Goals of Seating

- Promote function (provide support and control)
- Promote comfort
- Enhance appearance
- Promote body symmetry and prevent deformity
- Prevention of pressure sores
- Enhance respiratory function
- Promote sitting tolerance
- Control spasticity
- Decrease work of caregivers
How can you spot a problem with a seating system?

- Poor sitting posture
- Deformity, skin breakdown, impaired function, etc.
- Seating or functional goals are not being met
Ideal Sitting Posture

Pelvis
- Slight anterior tilt
- No obliquity or rotation
- Centred in seat

Legs
- Well supported thighs
- Hips, knees and ankles near 90
- Neutral hip rotation and abd/add
- Feet even on footrests

Trunk
- Symmetrical side to side
- Sl. lumbar lordosis, sl. thoracic kyphosis, sl. cervical lordosis
- Lumbar support
- Neutral trunk rotation

Upper extremities
- Shoulder neutral protraction/retraction
- Supported hand arches
Ideal Sitting Posture

Pelvis

- Slight anterior tilt
- No obliquity or rotation
- Centred in seat
Considerations when choosing a cushion

This client has a pressure sore…

Dear OT, please help…

“QUICK, get a ROHO!”
Maybe it is **NOT** the wheelchair’s fault!
Determine client needs...

- Comfort
- Pain reduction
- Pressure reduction
- Temperature control

- Positioning
- Mobility
- Function
Determine client’s risk factors

- Poor mobility
- Decreased sensation
- Decreased muscle mass
- Decreased strength
- Incontinence

- Poor hygiene
- Malnutrition/Dehydration
- Circulatory problems
- Other…
Considerations when choosing a cushion

- Comfort
- Weight
- Appearance
- Durability
- Support/
- Contour
- Stability

- Cleanability
- Cover options
- Temperature control
- Match with wheelchair
- Maintenance needs
- Size

- Removable
- Ease of use
- Incontinence
- Proof
- Pressure
- Reduction
- Cost
- Adaptability
Types of cushions

- Foam
- Fluid
- Air
- Combination
- Honeycomb
- Other
Properties of foam

- Most supportive
- Can contour to body
- Different densities for different regions
- Relatively inexpensive
- Lightweight
- Can be cut to individual’s shape
- Fair shock absorption
- Warm/hot
- May be difficult to clean
- Breaks down/wears out relatively quickly
- Least pressure reducing
Properties of fluid

- Less supportive than foam
- Easier to clean because it has a closed surface
- Fair pressure reduction properties
- Takes and holds temperatures (hot and cold)
- Can leak
- Relatively heavy
- Relatively expensive
Properties of air

- Most pressure reducing
- Easier to clean because it has a closed surface. Waterproof.
- Absorb impact

- Least supportive
- Requires a lot of maintenance and frequent pressure checks
- Relatively expensive
Properties of honeycomb cushions

- Fair pressure reduction
- Relatively easy to clean
- Lightweight
- Good support

- Strange sensation on buttocks
- Can wear out in 2-3 years
Properties of combination cushions

- May provide some support and some pressure reduction
- Features vary according to cushion style
Assessment Techniques

- **Interview**
  - Self care
  - Productivity
  - Leisure
  - Roles
  - Environment

- **In chair assessment**

- **Mat assessment**
  - Sitting – supported and unsupported
  - Lying

- **Simulation or assessment in trial system**
Funding

- Manitoba Health
  - SMD – Wheelchairs only
  - individual purchases own seating
- Third Party (eg. MPI and WCB)
  - vendors
- EIA
  - SMD
  - prefers Materials Distribution Agency for seating
- Medical Services
  - SMD
  - vendors with justification
Call Therapy First
with more questions

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