



Oedema- is it all fluid??

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WATER IN THE HUMAN BODY

Brain	75% Water
Blood	83% Water
Heart	79% Water
Bones	22% Water
Muscles	75% Water
Liver	85% Water
Kidneys	83% Water



SKIN 63%



The power of water!!!



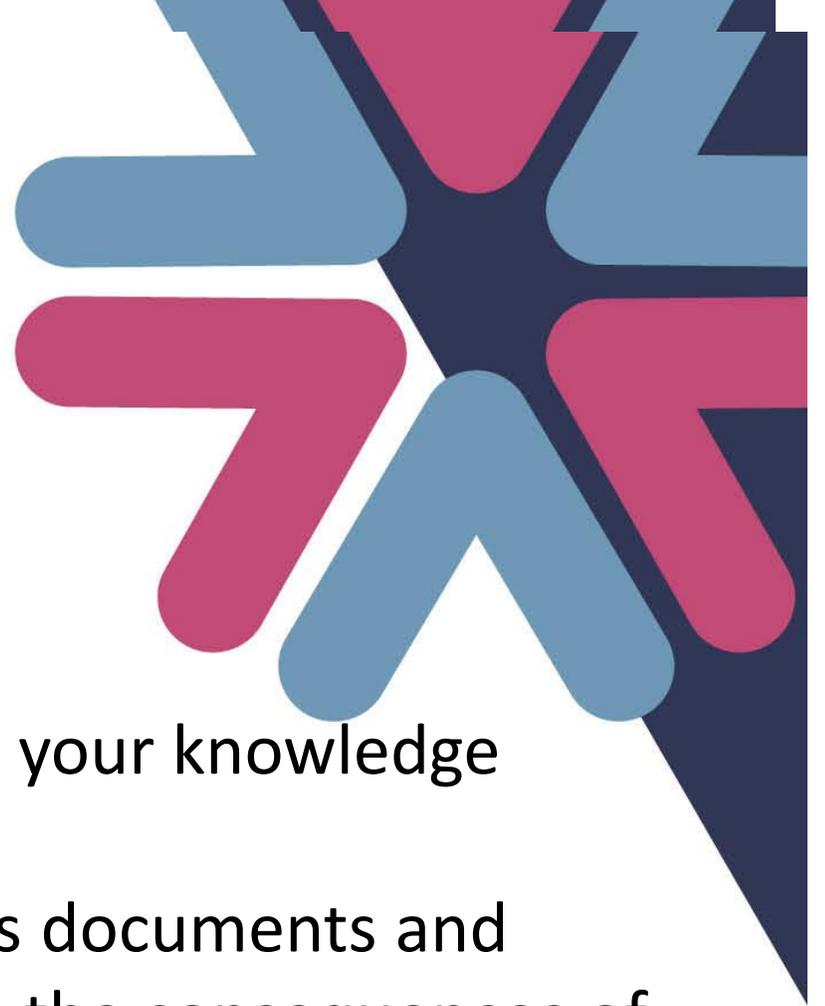


In my opinion oedema is one of the leading causes of failure to heal wounds

It also causes :

1. Wound recurrence
2. Acute and chronic pain
3. Restricted mobility
4. Disability
5. Patient distress





Speaking to all of you – I probably can add nothing to your knowledge

We all know of venous leg ulcer guidelines, consensus documents and best practice documents—yet we struggle to manage the consequences of oedema in some settings



Skin and it's stretchiness



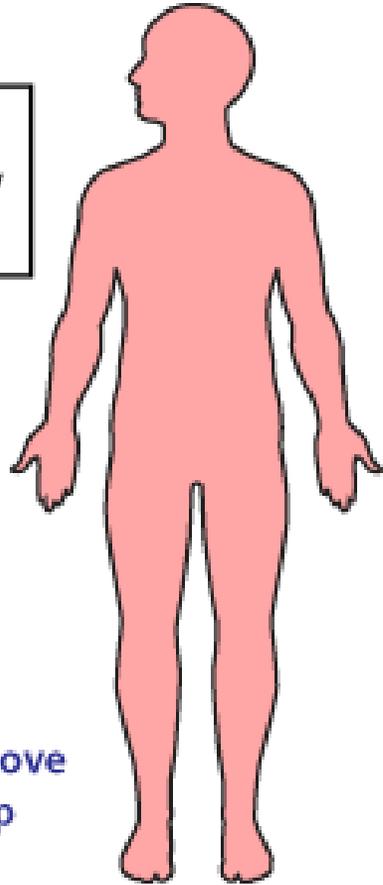
There comes a point when the skin can longer stretch



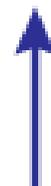


On Earth

Gravity and muscles spread fluids out evenly inside the body.

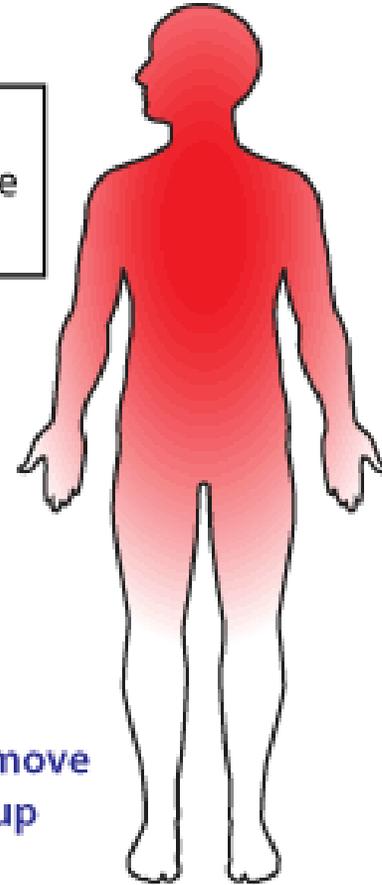



Gravity pulls
fluids down


Muscles move
fluids up

In Space

Without gravity,
fluids pool near the
chest and heart.




Muscles move
fluids up

The effects of gravity











So how do we stop the leak???

- Fix the gravitational issues?
 - Reduce the flow by other means? E.G by diversion?
 - Patch the hole?
- ****Treat the underlying medical condition that may be associated with the fluid accumulation





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WOUND EXUDATE

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FEATURE	TRANSUDATE	EXUDATE
Definition	Filterate of blood plasma without changes in endothelial permeability. Due to physiomechanical factors.	Oedema of inflamed tissue associated with increased vascular permeability, damage to serous membranes.
Character	Non-inflammatory oedema	Inflammatory oedema
Grossly	Typically clear, pale yellow fluid	Usually cloudy, yellow or bloody
Protein content	Low, no tendency to coagulate as mainly albumin, no fibrinogen.	High, readily coagulates due to high content of fibrinogen.
Glucose content	Same as plasma	Low
Specific gravity	Low	High
pH	>7.23	<7.23
LDH	Low	High
Effusion LDH/Serum LDH ratio	<0.6	>0.6
Cells	Few cells, mainly mesothelial cells and cellular debris	Many cells, inflammatory as well as parenchymal.



Local -infection, foreign body, oedema, sinus, fistula, tumour

Systemic - CCF, infection , endocrine disease, systemic medication, obesity, IV fluid overload, malnutrition, increased age, low serum albumin, raised CRP

Practical—wound position, heat , willingness to cooperate, inappropriate dressings



We know
the effects
of
excessive
exudate
production

Discomfort, pain and
embarrassment, reduced QoL

Costly due to increased need for
dressing changes

Increased risk of infection

Protein loss and electrolyte
imbalance



The focus is not necessarily on leg oedema-
oedema can occur anywhere in the body and
may/will have consequences





- We are here together to discuss and identify areas we can collectively improve on