Advanced Wound Care - DRESSING CLASSIFICATIONS

Cleansing

- Solutions, gels and dressings to promote irrigation of wounds

Hydrogel

- Consist predominantly of a polymer or copolymer and up to 95% water
- Provide a moist environment for wound healing, are non-particulate, non-toxic and non-adherent
- Particularly useful for rehydrating sloughy or necrotic tissue and enhancing autolytic debridement and due to limited absorbency they are recommended for low exudative or dehydrated wounds
- Preservatives are sometimes used to allow multiple usages, but may produce an allergic reaction

Foam

- Typically made from polyurethane, it may be heat treated on one side to create a semi permeable membrane
- Primary benefit is absorbency, but they also reduce dead space and conform to the wound
- By absorbing excess exudate these dressings reduce the risk of maceration of surrounding skin
- Some cushioning, insulating and protective benefits are also provided
- Can be combined with silver for malodourous wounds
- In some cases an additional adhesive layer is included or alternatively a secondary dressing applied

Silicone

- Silicone dressings adhere to dry surfaces gently and minimise wound and surrounding skin trauma during dressing change

Hydroactive

- Highly absorbent polymer dressings similar to hydrocolloids
- Rather than forming a gel when combined with wound exudate, they trap the fluid within the structure of the matrix and swell
- The adhesive matrix is secured by a film dressing which controls the evaporation of fluid from the dressing
- They do not adhere to the wound surface, are waterproof and bacteria proof, highly conformable and are available in various thicknesses and forms
- Recommended for wounds with a moderate to high level of exudate and not indicated for wounds with low-level exudate or clinical infection
- Care is needed when removing from very fragile skin

Antimicrobial

Silver

- Silver is a broad spectrum antimicrobial ideal for slow healing wounds
- Applied to various dressings such as foams to benefit malodourous wounds

Antimicrobial

- Harmful bacteria can delay wound healing and antimicrobials assist in decreasing the umber of bacteria, which consequently reduces the risk of infection and inflammation thus accelerating the healing process

Alginate

- Alginates are fibre products consisting of calcium and sodium salts derived from seaweed
- Offer high absorption
- They form a soluble sodium alginate gel when exposed to a moist wound environment
- Provide a haemostatic benefit for bleeding wounds due to the release of calcium ions that assist clotting
- They should not be applied to a dry wound as they can form a plug and in pressure areas cause additional trauma
- They are available as non-woven sheets, ropes or ribbons, and gels, for packing cavities and are also produced in combination with hydrocolloids
- Recommended for moderate to highly exudating wounds
- A secondary dressing is required
- The dressing should be soaked with sterile saline before removal to prevent adherence and minimise skin trauma

Hydrocolloid

- Hydrocolloids are moisture retentive and contain gel forming agents
- Can be combined with elastomers and adhesives which are applied to a film or foam to create an absorbent, self adhesive, waterproof wafer
- When applied to exudative wounds, the hydrocolloids absorb liquid and form a gel and have an autolytic debriding effect
- In paste or powder forms, they can also reduce the amount of dead space
- Typically the hydrocolloids are not recommended for clinically infected wounds due to their semi occlusive nature

Semi Permeable Film

- Film dressings are made up of a thin (usually polyurethane) membrane coated on one side with a layer of adhesive
- They are permeable to atmospheric gases and moisture vapour and are waterproof and bacteria proof
- Allows easy inspection of a wound
- Often used as a secondary dressing
- Can be combined with an absorbent pad
- Care must be taken upon removal to ensure skin trauma does not occur
- Can assist in documentation, allowing the tracing of the wound for medical records

Honey

- Honey dressings registered with the Therapeutic Goods Administration can promote moist wound healing, autolytic and osmotic debridement
- Antimicrobial
- Care should be taken to monitor maceration of surrounding skin

Cellulose Gelling Fibres

- These dressings are similar to alginates but are made up solely of carboxymethyl cellulose fibres. The fibres convert to form a gel upon contact with exudate.
- Offer high absorption
- They are much less likely to dry out and will not leave fibres in the wound
- Not haemostatic
- Recommended for highly exudative wounds

References:
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