Figure 5: *Blister dressings*

Although specifically designed primary and secondary dressings exist to preventively mask friction-prone skin areas and/or to cover them following development of blisters, the aforementioned moisture vapor permeable adhesive film and hydrocolloid dressings can be used to prevent and treat blisters as well. (Figure 5) When selected to be used on feet, many have to be covered with tape to keep them in place and/or to protect them from friction.

Tape can also be used on its own to prevent blisters. Sheets, such as self-adhesive, non-woven fabric dressing retention sheets, or tape rolls with a peel-off backing, are much more convenient than most rolls of tape where the tape sticks to itself, as the required amount and sizes can easily be cut and stored flat, thus usually taking significantly less space, while they can also easily be split over different kits or kit components. (Figure 6)

Figure 6: *Self-adhesive tape and dressing retention sheets with peel-off backing*

For the surface closure of cuts, wound closure strips are useful, and often preferred to anything else.[51,52] They take up less space than specially designed butterfly bandages, although both can be improvised using other types of adhesive tape.

Skin adhesive

In order to improve the adhesive power of tape, wound closure strips, and blister dressings, a skin adhesive may be required. Compound tincture of benzoin, or Friar's balsam, is widely used, but may not always be able to sufficiently augment adhesion in wet environments.[53] Preparations containing gum mastic reportedly provides better adhesive strength than those based on benzoin.[54,55] (Figure 7)

Skin cleaning fluid

An alcohol-based skin cleaning fluid is useful to clean the skin before applying adhesives so they will stick better. Some types are claimed to also toughen the skin, which is useful as a blister prevention measure,[56] but firm data confirming this characteristic is lacking.

Figure 7: *Gum mastic (left) and compound tincture of benzoin (right) skin adhesives*

Foot powder

Foot powder may help to prevent friction blister formation on feet. Many types are only of benefit for a short while and actually increase the occurrence of blister formation when used longer than one hour, while aluminum-containing antiperspirants may work better for long-duration use.[57] Foot powder is also useful when using tissue adhesives to reinforce blister dressings, where it can be sprinkled after applying the dressing, in order to neutralize any adhesive extending beyond the margins of the dressing, preventing socks from sticking to the skin or to the dressing[58].

Lubricants

Lubricants are useful to prevent or alleviate the painful effects of chafing by clothing or equipment against the skin, which depending on the individual, typically occurs on the inner thighs when sweating heavily or when clothing gets wet from rain. Care should be taken when selecting a product that is intended primarily to be applied to the feet, as just like some foot powders, they may increase the incidence of blisters during long-duration activities.[59] Bottles with a roll-on applicator are often bulky and heavy and may easily leak their greasy contents. A semi-solid lubricant such as petroleum jelly (petrolatum, soft paraffin) is more convenient and can also be used to protect the lips from the wind, or to soothe cracked skin. Vaseline gauze can be used for treatment of injuries and can also serve as a candle when needed.

Analgesics

Different types of painkillers should be carried. An antipyretic analgesic provides relief for minor pain, and also reduces fever. Acetaminophen (called paracetamol in Europe) is the usual drug of choice. Acetylsalicylic acid (aspirin) is to be avoided, as it acts as a blood thinner (impeding blood clot formation in case of bleeding) and is more easily affected by heat and humidity. Anti-inflammatory analgesics provide relief for mild to moderate pain, and are useful for musculoskeletal pain such as sprains and bone injuries. Traditional non-steroidal anti-inflammatory analgesics, such