The properties of an "ideal" burn wound dressing - What do we need in daily clinical practice? Results of a worldwide online survey among burn care specialists.

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Abstract

OBJECTIVE:
Using Internet polling to classify characteristics of a burn wound dressing considered as "ideal" by burn care specialists for small sized burns (<20% TBSA).

METHODS:
Open, voluntary Internet-based cross-sectional survey with twenty non-compulsory questions and collection of information related to profession, staff grade, work location.

RESULTS:
In total one-hundred and twenty-one participants from 39 countries were included (response rate: 121/1000=12.1%) within the one month survey period (1-31st December 2011). The majority of respondents were surgeons (72.1%; 88/121), and most participants were from Europe 59.4% (72/121). According to the survey the following are the properties of an "ideal" burn wound dressing: non-adhesion ("essential": 55/120, 45.8%; "desirable": 50/120, 41.7%), absorbency ("essential": 41/120, 34.2%; "desirable": 64/120, 53.3%) and antimicrobial activity ("essential": 52/121, 43.0%; "desirable": 49/121, 40.5%). In addition, ease of removal, which would produce more pain-free dressing changes, was also considered to be an asset - ideally requiring dressing changes twice per week with a range of different dressing sizes available. As polled directly, most of the respondents thought that such a dressing was currently not available.

CONCLUSION:
This Internet-based survey provides a first insight into a 'wish list' of properties for burn wound dressings required by specialists in burn care from around the world. As with any kind of idealism, to date, no such burn wound dressing seems to be available in clinical practice according to the poll. Future scientific efforts need to focus on designing materials, which feature at least some of the properties revealed by this analysis.