Pegylated liposomal doxorubicin-associated hand-foot syndrome: recommendations of an international panel of experts

Roger Von Moos, Beat Thürlimann, Matti Aapro, Daniel Rayson, Karen Harrold, Jalid Sehouli, Florian Scotte, Domenica Lorusso, Reinhard Dummer, Mario E Lacouture, Jürgen Lademann & Axel Hauschild

BACKGROUND: Hand-foot syndrome (HFS) is dose-limiting and the most common cumulative toxicity associated with pegylated liposomal doxorubicin (PLD). It can cause considerable discomfort and lead to therapy interruption. Numerous approaches to HFS management have been reported, but there is no consensus. METHODS: Published literature (identified via Medline and internet search) and expert experience regarding HFS and its pathogenesis, incidence, risk factors, prevention and treatment in patients undergoing treatment with PLD were collected and reviewed by a panel of experts. A consensus technique was used to develop recommendations. FINDINGS: The pathogenesis of PLD-associated HFS has been recently elucidated. Systems used to grade, prevent and treat HFS in individuals treated with PLD vary widely. A randomised clinical study demonstrated that PLD dose intensity reduction can prevent HFS. While there is limited literature support, patient education and supportive measures were endorsed by the expert panel as effective strategies for HFS prevention and treatment. An easy to use HFS grading and management algorithm was developed, early signs and symptoms of HFS outlined and specific recommendations for supportive care developed. INTERPRETATION: The paucity of data on the management of PLD-associated HFS led the expert panel to develop consensus-based recommendations. Patient education and supportive measures are important elements in the management of HFS and dose intensity reduction has documented efficacy in prevention. At a PLD dose intensity not exceeding 10mg/m² weekly, HFS can be easily managed. Phase III research to support the efficacy other interventions is lacking.