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Recent Advances in Drug Discovery Against Sulphur Mustard Intoxication

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Sulphur mustard (SM) is one of the most important blistering and vesicating agents. It is a chemical weapon of choice by the military and the terrorist groups, due to its prolonged action it produces mass casualties requiring prolonged and intensive care. The most common complications of SM occur in lungs, skin and eyes which are the principal target organ due to its direct effect. Despite rigorous research efforts on the antidote development to SM, employing a variety of *in vivo* and *in vitro* systems and using various mustard agents so far no satisfactory and recommended treatment has evolved. In view of the possible threat from various sources against the military and civilian populations, and the risk during the destruction of stockpiled mustard agents, development of a suitable antidote is prime requirement. The physicians should also be aware of the mass casualty due to SM exposure should be knowledgeable about the various medical countermeasures. In this chapter the various antidotes and treatment regime experimented in animal models and the treatment regimens recommended in human casualties are reviewed.