

Use of autologous fibrin glue in the treatment of splenic trauma: an experimental study.

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Abstract:

There is little doubt that preserving the spleen will contribute to a much more favourable outcome in patients undergoing splenic surgery, as a result of avoiding the well known risks of splenectomy. Among many operative methods described for splenic salvage, application of autologous fibrin glue (AFG) is particularly promising because of its unique characteristics. The use of AFG has been evaluated and its efficacy and tissue compatibility assessed in the treatment of splenic trauma in 15 partially splenectomized New Zealand White rabbits. The application of the AFG to the resected splenic surface achieved complete haemostasis in all animals. The animals were divided into four groups and were killed at varying intervals ranging from 24 h to 10 weeks. During re-exploration there was no evidence of recurrent bleeding and histopathological examination revealed progressive absorption of the AFG with a minimal inflammatory response. It is concluded that AFG is an effective haemostatic agent with good systemic and local compatibility and can be used in splenic salvage, which thereby avoids the use of non-autologous products with their risks of disease transmission.