

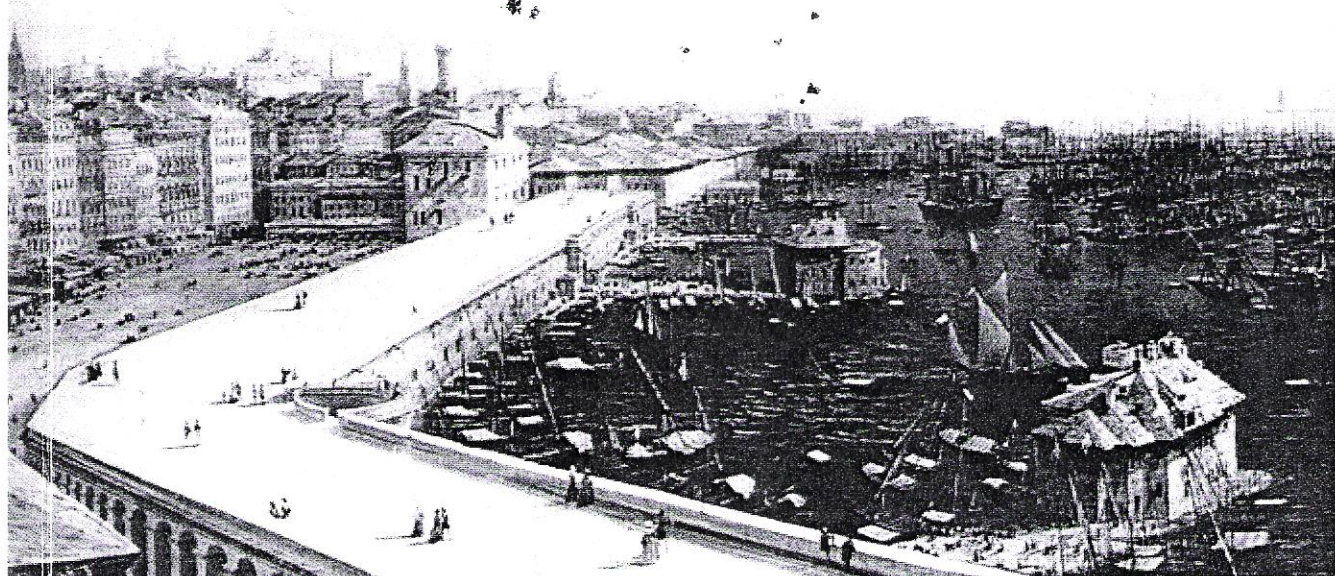
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S2-12 (PP) ANALYZE OF USEFULNESS OF DIETILAMINOETIL-DEXTRAN/HIALURONIC ACID (DEXELL®) FOR TREATMENT OF VESICOURETERIC REFLEX

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PURPOSE

To examine usefulness of Dietilaminoetil-Dextran/Hyaluronic acid (Dexell®) for treatment of vesicoureteric reflux in an experimental model.

MATERIAL AND METHODS

24 New Zealand type male rabbits were used in our study. They were divided into 3 groups. 1cc low viscosity Dexell® was injected submucosally into trigone of bladder of group 1 and bulging parts were measured. The same procedure was performed for the other groups with 1cc of high viscosity 1cc of saline in order. All animals were re-operated six weeks after injection and area of injection were measured. In order to assess viability of injection material and long migrations, tissue sampling were performed from area of injection, normal bladder wall, kidneys, lungs, and brain.

RESULTS

After injection of first group, measured mean diameter of injected area was 1,5cm and six weeks later, it was 1cm (0,9-1,4cm). At the second group, mean diameter of the injected area was measured 1,5cm and six weeks later it was 1,4cm (1,4-1,5cm). Six weeks after first injection, difference of diameter of injected area between group 2 and group 1 was statistically significant ($p < 0.001$).

At pathological analysis, there were foreign body reaction and dystrophic calcification in non-injected part of bladder's of 3 rabbits in this group. There was no foreign body reaction in samples of kidney, brain and lung in this group.

There were foreign body reaction in all injected parts of bladders of group 2, but not had in non-injected part of bladder. Also there was no foreign body nor foreign body reaction in samples of kidney, brain and lung.

CONCLUSIONS

In this study viability and foreign body reaction in high viscosity Dexell® is better than low viscosity. It must be supported with long term studies.

S2-13 (PP)

HISTOLOGIC RESPONSES OF DIFFERENT BULKING AGENTS WHICH ARE USED FOR ENDOSCOPIC REFLUX TREATMENT, ON RATS' BLADDER AND SUBCUTANEOUS TISSUE

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PURPOSE

To compare the histopathological responses of different bulking agents (2 different dextranomer materials, 1 polyacrylate material), on rat bladder and subcutaneous tissue.

MATERIAL AND METHODS

Thirty rats are divided into 3 groups and each injected with Deflux® (DxHA-Df), Dextell® (DxHA-Dx) and Vantris® (PPC). In each group, 5 rats are scarified at 2nd and 6th month of injection. Comparisons were done by scoring inflammation (IS), neutrophil (NS), eosinophil (ES), macrophage (Mps), mast cell (MCS) and giant cell (GCS) reaction at both inside and outside of the injected material.

RESULTS

All the materials had the same amount of capsule formation around which was unrelated with the degradation property of the material. All maintained their bulky effect during the study. Despite the significant amount of degradation with dextranomer materials, there was minimal degradation with PPC. For subcutaneous injections, at 2nd month, MCS around injection and GCS inside injection was significantly lower in PPC group. At 6th month, MCS around injection was lower in PPC group whereas IS around injection was highest in PPC group. For bladder injections, the only different score was the higher ES inside injection for PPC group. However, at 6th month there was no significant difference in scores regarding the groups.

CONCLUSIONS

Long term results show that both dextranomer agents were degradable with good capsule formation and minimal foreign body reaction at the adjacent tissue. However, PPC degraded minimally and cause significant foreign body reaction on adjacent tissue which may have clinical implications. Although endoscopic approach for reflux is widely used, ideal bulking agent is not yet available.