Use of tissue sealant for day surgery parotidectomy.

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Abstract:

OBJECTIVES: To evaluate the use of tissue sealant in facilitating day surgery parotidectomy without the use of surgical drains and to consider the potential economic benefit using this technique.

STUDY DESIGN AND SETTING: Prospective cohort study of 21 patients undergoing parotidectomy for nonmalignant disease in a university hospital. Surgery as a day procedure without the use of surgical drains was planned. The costs associated with parotidectomy, including the use of tissue sealant and its delivery system, versus in-patient admission with a drain were calculated and compared.

METHODS AND OUTCOME MEASURES: Parotidectomy was undertaken by one surgeon. Prior to wound closure, the skin flap and wound bed were approximated using Tisseel tissue sealant (Baxter Corp., Mississauga, ON). Data regarding the costs of the tissue sealant, the delivery system, and hospital in-patient stay were obtained to enable an economic comparison. Patients were followed to assess surgical outcome and document any complications.

RESULTS: There were no major surgical complications. One patient required admission for control of postoperative nausea. None of the patients felt that discharge had been premature. The estimated cost advantage of this technique applied to institutions in Canada was $1,775 per case.

CONCLUSIONS: Parotidectomy can be undertaken safely in a day surgery setting without the need

for surgical drains. The increased cost associated with the use of tissue sealant compared with surgical drains is greatly overshadowed by the economic advantage of undertaking day surgery. There is a significant potential cost saving to the health care system.