

Abstracts of Session 2b

Nosocomial and iatrogenic infections

2b1

A postoperative infection in ambulatory procedures—how bad is the situation?

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Same popular layman and even medical profession opinion is that due to less optimal conditions during the procedures, there is higher frequency of postoperative wound infections following ambulatory surgical procedures compared with in hospital settings. This survey presents the rate of postoperative infective complication in our ambulatory setting in comparison to in hospital rate of postoperative infections ministry of Health-1999.

Two thousand, four hundred and twenty one surgical interventions concluded in ambulatory operating theater of Netaya Leumit health fund during the period of 1/1/1999–31/12/1999 are included in this survey.

The results of the survey are presented in the following table:

Procedure classification	Number of procedures	Number of postoperative infections	% Ambulatory postoperative infections	% Hospital postoperative infections
Clean	1215	9	0.74	1.1
Clean contaminated	922	5	0.54	0.6
Dirty infected	284	3	1.056	6.7

Present survey results show lower rate of infective complications in our ambulatory setting compared with in hospital postoperative complication rate.

In our opinion there are three main different causes of lower rate of ambulatory postoperative infections.

1. High professional competences of operators — senior doctors only perform the interventions in our ambulatory setting.
2. Differences in patient case mix-ambulatory procedures are performed only if the patient's physical condition is 1–2 according to American anesthesiology association classification.
3. Short stay in setting — our postoperative patients stay shortly in the ambulatory setting as compared with in-hospital patients with longer stay and higher rate of contacts with other and severely ill patients.

2b2

The mycobacterium infection detected in a surgical hospital outpatient centre

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The great part of mycobacterium tuberculosis infection (MTI) is attributed in less developed countries, but from 1986, is increasing. We wished to check MTI observed in a surgical outpatient centre. Case 1: Z.E., 57 years, F. Earlier left nephrectomy for MTI. The patient presents a right sub-mammary lump D. 7 × 5 cm. Removal, drainage of an abscess of chest wall (histology MTI). Case 2 Cp₂ K.A., 79 years, F., Roundish lump D. 5 cm, in mammography and ecography compatible as mali moris breast lesion. At the operation abscess and pleural fistula, which spreads to the breast tissue (histology MTI). Case 3Cp₂ D.T., 30 years, M., coloured, back abscess, and lump near left latissimus dorsi muscle, D 10 cm. Cultural exams identify MTI, without bronchopleural connection. Case 4: Removal of squamous carcinoma of the wrist. Chest X-ray shows cavitation without bronchial communication, treated with chemotherapy. Considering 24374 patients treated in the outpatient centre, in the period 93–98, and that before we have not noticed MTI, and that these patients were not HIV positive, MTI represents 0.016%, can be identified with cultural and histological exams, is benign and increasing in industrial countries. Patients at risk are immunodepressed old, also if HIV negative, immigrates and with precedent infection.

2b3

Advantages of the oral antibiotic prophylaxis

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We thought it right to experiment and encode a new method of antibiotic oral somministration, taking into account both the high overall cost for infection of a surgical wound and the absence in Literature of the absolute usefulness of antibiotic prophylaxis in Day Surgery. The choice of oral somministration has been made considering its low cost and its ease of somministration. From 1 January 1999 to 31 October 2000, 407 patients with different pathologies (hernias, varices, sacrococcygeal cysts, small incisional hernia, breast tumor, adipomas of wide dimension, gynecomasias) were submitted to surgical treatment in Day Surgery at 'B' surgical Department of the Hospital of Biella. The oral antibiotic prophylaxis has been performed using a cyproflaxacin suspension (Ciproxin) 1.5 h before the

surgical treatment, taking into account the peak value of the drug. In any case the somministration has been repeated during the afternoon subsequent surgical treatment, or on the following days. Two daily temperature measurings at the patients home have been performed as well, as controls of wounds, which have been carried out 2 days after surgical treatment and on the removal of the stitches. In case of secretion from the wound cultural exams have been performed, always with negative results. Under an objective exam neither infected wounds nor relevant rises in temperature have ever been found in the 407 treated cases. Oral somministration has proved as effective as parenteral somministration, in our experience. The cost of the somministration is the lowest, which can be obtained (Lit. 2220 total per patient). There is no need of syringes, needle, phlebotomy, disinfectant, moreover, time spent by paramedical staff is shorter than time spent when parenteral somministration is used.

2b4

Guidelines for antibiotic prophylaxis in day surgery

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INTRODUCTION: Surgical wound infection is one of the most frequent and dangerous postoperative complications, which can interfere with the patient's recovery.

The aim of this work is to propose guidelines for antimicrobial prophylaxis appropriate for this kind of surgical operation.

METHODS AND MATERIALS: Applied in our Day Surgery are: Urological Surgery (phimosis, hydrocele, varicocele); Proctologic Surgery (anal papilla, anal fistula, anal rhagade, hemorrhoid, pilonidal cystis); lymphonodus' biopsy; central venous catheter, peridural subarachnoid catheter: usually no antibiotic prophylaxis.

Breast tumour (nodule excision, quadrant excision, simple mastectomy, galactophore excision); sentinella lymphonodus' biopsy; neofomation excision; usually no antibiotic prophylaxis; after 2 h Cefazoline 2 g i.v., in allergic patients: Cotrimoxazole (two phiales in 250 ml of Dextrose 5%).

Hernia repair (inguinal, crural, epigastric, exumblication) without prothesis: no antibiotic prophylaxis; with prothesis: Cefazoline 2 g i.v. and 6 h after the first dose Cefazoline 1 g i.v.; in allergic patients Cotrimoxazole or Ciprofloxacin 200 mg i.v.

Vascular Surgery (varicous vein, saphenectomy, arterio-venous fistula), totally implanted central venous port Systems, totally implanted peridural and subarachnoid systems; spinal cord stimulator: cefazoline 2 g i.v.; in allergic patients Ciprofloxacin 200 mg i.v. or Clindamicine 600 mg i.v.

CONCLUSIONS: In the first 10 months, since the start of the Day Surgery Unit, 730 patients have been operated on and there has been only 3.2% of infections. As a consequence, these guidelines can be considered valid.