access. Thus, in this controlled trial, following induction with 14 days of IV ganciclovir (6mg/kg IV qd), CMV-seronegative liver transplant recipients with CMV-seropositive donors were randomized to receive either oral ganciclovir (1000 I mg 18hrs, Mon–Sun) or IV ganciclovir (6 mg/kg qd, Mon–Fri) until day 100 after transplant. Patients were followed until time of death or 12 months after transplant. CMV disease occurred in 3/32 oral ganciclovir patients (9.3%) and in 4/32 IV ganciclovir patients (12.5%). Types of CMV disease: oral ganciclovir (syndrome 2, hepatitis 1); IV ganciclovir (syndrome 3, hepatitis + colitis 1). There were no deaths from CMV in either study group. All cases of CMV disease occurred >90 days after transplant (median time of onset day+137 for oral ganciclovir and day+135 for IV ganciclovir). Both oral and IV ganciclovir were well-tolerated. Reversible leukopenia (WBC <3000/mm^3) occurred in 9/32 oral ganciclovir patients (28.1%) and in 12/32 IV ganciclovir patients (37.5%) but did not require withdrawal of any patient from the study. Emergence of ganciclovir-resistant strains of CMV was not found during the study. These results suggest that, following induction with 2 weeks of IV ganciclovir, oral ganciclovir can be as effective as IV ganciclovir for long-term CMV prophylaxis in high-risk CMV-seronegative liver transplant patients with CMV-seropositive donors and eliminate the need for prolonged IV access.

Predictors of low efficacy of hepatitis B vaccination in hemodialysis (HD) patients

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Two hundred and sixteen HD patients (M:102, F:114, aged 45.17±12.84) received recombinant hepatitis B vaccine (Combiotech Ltd, Russia) or Engerix B. The protocol of vaccination scheduled 4 doses of 40 μg at 0-1-2-6 months. Before the end of vaccination 13 pts (6%) had acute hepatitis B. HBsAb levels in this group was <100 IU/L after the 3 mos. 27 pts (13%) at the end of vaccination had HBcoreAB. The efficacy of vaccination was evaluated by the determination HBsAb levels after 3 and 7 mos from the beginning of immunization in 176 pts. The frequency of seroconversion (HBsAb level from 10 to 99 IU/L) after 3mos was 23% and it was 13% after 7 mos. The rate of seroprotection (HBsAb level ≥100 IU/L) after 3 mos reached 50% and increased up to 70% after 7 mos. Relation between some factors involved in immune response and vaccination efficiency in 46 pts was studied. In patients with HBsAb level <100 IU/l count CD3 lymphocytes were 0.84±0.1 10^9/l, CD20–0.36±0.04 10^9/l, and concentration of IL-1–2.78±0.63 pmol/ml, IL-2 –13.36±1.97 pmol/ml, IgM – 0.84±0.14 g/l. In patients with HBsAb levels ≥100 IU/l these values were significantly different ($p<0.05$) and were equal to 0.95±0.16 10^9/l, 0.41±0.05 10^9/l, 3.22±0.77 pmol/ml, 15.96±3.2 pmol/ml, 1.1±0.24 g/l, respectively. Logistic regression analysis and criteria tables method permitted to determine the predictors of low efficacy of vaccination in HD patients: amount CD20 lymphocytes ≤3.5(10^9/π, concentration IgM ±0.95 π/π, IL–2 ≤12 pmol/ml, transferrin in blood >2.8 g/L. The presence of two and more from these parameters allows the prognosis of negative or low response to vaccination. Sensitivity and specificity of such prognosis equal 86% and 84%, respectively.

BACTERIAL INFECTIONS

Activity of 26 antimicrobial agents tested against *Listeria monocytogenes:* eighty-four isolates from patients with systemic listerosis at a comprehensive cancer center during the later half of the last century

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Introduction: Systemic infections due to *Listeria monocytogenes* are infrequent but serious complications in patients with an underlying malignancy. Institution of appropriate therapy is critical in improving outcome especially in patients with profound defects in cellular immunity.
Methods: In vitro antimicrobial susceptibility profiles of 84 clinical isolates of *L. monocytogenes* from patients with listeric infections during 1955 to 1997 at Memorial Sloan-Kettering Cancer Center in New York were reviewed retrospectively.
Results: The 84 *L. monocytogenes* isolates showed greater than ninety percent *in vitro* susceptibility to penicillin (97.6%), ampicillin (90.7%), erythromycin (98.8%), tetracycline (96.9%), and gentamicin (98.0%). No *in vitro* resistance was observed for trimethoprim-sulfamethoxazole (TMP-SMX), rifampin, amikacin, vancomycin, imipenem/cilastatin, and ciprofloxacin. High-level resistance to clindamycin (96.2%), and amoxicillin/clavulanate (100%) was unexpected. The MIC_{50} and MIC_{90} among 26 *L. monocytogenes* during 1991 to 1997 for penicillin and ampicillin were 0.5 and 1.0 μg/ml respectively. During this period MIC_{90} for gentamicin, imipenem/cilastatin, and ciprofloxacin was ≤1.0 μg/ml.
Conclusions: Since 1955, we observed no interval increase in resistance for penicillin, ampicillin, gentamicin and TMP-SMX among *L. monocytogenes* in our high-risk listeric patients. Amoxicillin/clavulanate does not appear to be an adequate choice for oral therapy in this setting. The newer antimicrobial compounds such as