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Session : Postgraduate Course 10 (Liver)

Date & Time, Place : November 17 (Thu), 15:00-16:30, Room 3F-1

Session Title : Postoperative Management and Long-Term Outcome

Prophylaxis for posttransplant infection

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Infectious complications are major factors that affect morbidity and mortality after liver transplantation. It includes bacteria, fungus, and virus and the incidence and clinical courses are differ between species and patients. According to countries and center specific epidemiologic data, each transplant center has modified program of infectious disease prophylaxis. Perioperative antibiotics are routinely used for prevention of bacterial intra-abdominal infection. Main targets are enterobacteriaceae which are normal flora but that can affect transplanted liver across hepatobiliary mucosal barrier. Commonly used prophylactic antibiotics are third generation cephalosporin alone and/or combination with aminoglycoside, aminopenicillin, and ureidopenicillin with beta-lactamase inhibitor. Glycopeptide is not routinely included for liver transplantation. Durations are 3-7 days, however can be modified according to existence of pre- and post-transplant infection, extent of biliary or hepatic injury, MELD score, and risk of donor-derived infection. After transplantation, prolonged uses of antibiotics or changing regimens are as a means of empiric or targeted therapy. For fungal prophylaxis, several meta-analyses reported that universal antifungal prophylaxis has been reported no beneficial effect for survival but decreasing the overall incidence of infection and colonization. Clinicians might consider trading off the effect of increasing non-albicans candida infections, side effects, drug interaction and medical cost. In Korea, one forth centers did not introduce routine antifungal prophylaxis but some centers use fluconazole as a short-term fungal prophylaxis. Trimethoprim/sulfamethoxazole is used to prevent *Pneumocystis jirovecii*. For viral infection prophylaxis, main target is herpesviridae. Cytomegalovirus is well known as an immune modulating virus that can cause organ-specific disease where the virus affects, allograft dysfunction with related morbidity and mortality through direct and indirect effects. Universal prophylaxis, pre-emptive therapy, and combination of both strategies are effective. For viral infection prophylaxis, some centers did not use routine anti-viral agents however some centers use oral valganciclovir. Currently, Infection Control Committee of the Korean Society for Transplantation performed nationwide survey of prevention protocols of each transplant center and the result will be reviewed in this session.