

Cardiac abnormalities in cirrhosis - impact on outcome of liver transplantation and quality of life

AKADEMISK AVHANDLING

Som för avläggande av medicine doktorsexamen vid Sahlgrenska akademien vid Göteborgs universitet kommer offentligen försvaras i hörsal Waldemar Sjölander, medicinaregatan 7, Göteborg, torsdagen den 20 november 2014 kl. 13.00

av
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Leg. Läkare

Fakultetsopponent:
Professor Søren Møller
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Avhandlingen baseras på följande arbeten:

- I. Impact of peri-transplant heart failure & left-ventricular diastolic dysfunction on outcomes following liver transplantation**
Josefsson A, Fu M, Allayhari P, Björnsson E, Castedal M, Olausson M, Kalaitzakis E.
Liver International 2012 32 (8) 1262-1269
- II. Pre-transplant renal impairment predicts posttransplant cardiac events in patients with liver cirrhosis**
Josefsson A, Fu M, Björnsson E, Castedal M, Kalaitzakis E.
Transplantation. 2014 98 (1) 107-114
- III. Prevalence of pre-transplant electrocardiographic abnormalities and post-transplant cardiac events in patients with liver cirrhosis**
Josefsson A, Fu M, Björnsson E, Kalaitzakis E.
BMC Gastroenterol. 2014 5;14:65
- IV. Impact of cardiac dysfunction on health-related quality of life in cirrhotic liver transplant candidates**
Josefsson A, Fu M, Björnsson E, Castedal M, Kalaitzakis E
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**Cardiac abnormalities in cirrhosis
- impact on outcome of liver transplantation and quality of life**

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Abstract

Background & Aims: Cirrhotics are frequently affected by cardiac dysfunction, both coronary artery disease and cirrhotic cardiomyopathy. However the prevalence and predictors of heart failure and cardiac events following liver transplantation is inadequately investigated. It is also not known if cardiac dysfunction affects quality of life in cirrhotics. We aimed to identify predictors and prevalence of post-transplant adverse cardiac events. We also aimed to assess the impact of cardiac dysfunction on quality of life in cirrhotics.

Methods: We conducted two retrospective cohorts studies of cirrhotics (n=234 and n=88), one that underwent liver transplantation and one at pre-transplant evaluation. In the first cohort we registered pre-transplant data of liver disease, medications, clinical evaluation, and cardiac workup. We then followed the patients (mean 4 years) and attempted to identify factors associated with cardiac outcome. In cohort two we registered the same data in addition to Quality of life questionnaires.

Results: Heart failure was found in approximately a quarter of patients following transplantation and transplanted patients were 14 times more likely to have a cardiac event compared to the general Swedish population (n=70). Risk factors included age, renal dysfunction, diastolic dysfunction, and ECG abnormalities. Quality of life does not seem to be affected to cardiac dysfunction in cirrhotics.

Conclusions: Cardiac complications are common in cirrhosis at liver transplantation and are associated with adverse outcome but not a lower quality of life.

Keywords: Cirrhosis, Heart failure, Cardiac events, Renal failure, Quality of life

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