# Transplantation hépatique et don d'organes

# ID: 327 Sickle cell disease and liver transplantation: Review of 5 recent cases

S. Naili\*(1), L.Toubal(1), M.Moussa(1), H.Kato(1), B.Badreddine(1), A.Joosten(1)

(1) ANESTHÉSIE, PAUL BROUSSE, Villejuif, France

\*Auteur présenté comme orateur

## Position du problème et objectif(s) de l'étude:

Hepatic complications in sickle cell disease (SCD) are frequent. However, severe forms with terminal liver failure are rare. Liver transplantation (LT) then becomes a possible treatment. However, data regarding LT in patients with SCD are rather rare and limited to mostly case reports or small case series. We reviewed the last 5 patients who underwent a LT at Paul brousse in order to describe the characteristics of the patients at the time of their access to LT and their perioperative outcome

#### Matériel et méthodes:

Retrospective study of five patients. Results are expressed as number, percentage, mean  $\pm$  standard deviation

## **Résultats & Discussion:**

Patients had  $37\pm16$  years old ( $163\pm19$  cm and  $51\pm8$  kg). The mean MELD score just before LT was  $23\pm12$ . The main reason of their LT was acute liver failure on cirrhosis (N=3), fulminant hepatitis (N=1) and autoimmune hepatitis (N=1). All patients were hospitalized before their surgery ( three on the ward and 2 in the intensive care unit). One patient with fulminant hepatitis was treated before surgery with MARS, and was under assisted mechanical ventilation and norepinehrine infusion. Surgical duration was  $534\pm35$  minutes. Intraoperative transfusion was necessary in all patients with an average of  $4\pm2$  units of packed red blood cells. Two patients needed fresh frozen plasma and platelet transfusions. Intraoperative blood loss was  $3180\pm2280$  ml. Lactate concentration at the end of the surgery was  $4.4\pm1.6$  mmol/l.

#### **Conclusion:**

results: Only one patient had major hemodynamic instabilities intraoperatively. Norepinephrine at the end of surgery was on average at  $0.7\pm0.2$  mg/h. All patients (except one) were extubated on postoperative day#1. Intensive care unit and hospital length of stays were  $7\pm4$  and  $17\pm2$  days respectively. All patients presented at least one major postoperative complications (severe AKI requiring renal replacement therapy (RRT)

(N=1), severe AKI not requiring RRT (N=2), pneumonia (N=1), biliary complication (N=1), portal thrombosis (N=1), retro-hepatic hemorrhage (N=1), early allograft dysfunction (N=1), subarachnoid hemorrhage (N=1), multiple organ failure (N = 1). One patient died 16 days post-surgery from a subarachnoid

hemorrhage.

Conclusion: LT for severe liver failure in sickle cell patients is feasible but is associated with an extremely high morbidity and mortality during the early postoperative period

Les auteurs déclarent ne pas avoir toute relation financière impliquant l'auteur ou ses proches (salaires, honoraires, soutien financier éducationnel) et susceptible d'affecter l'impartialité de la présentation.