NIDDK Liver Transplantation Database
MANUAL OF OPERATIONS (MOOP) DEFINITION

Purpose: This form is used to collect additional pre-operative and intra-operative data on all transplant patients. This form is used in conjunction with the Intra-operative (IO) form.

Person(s) Responsible: LTD Clinical Coordinator, anesthesiologist.

Source(s) of Information: Intra-operative record.

General Instructions: This form is completed for each transplant performed for each patient. Transplants are numbered consecutively if a patient undergoes more than one transplant. Note that only patients who receive(d) a first liver transplantation as an LTD patient should be considered.

PATIENT ID

This is the LTD assigned patient ID which can be obtained from the IO form for this patient.

Completing Form: Record the LTD patient ID as recorded on the IO form.

TRANSPLANT NUMBER

This is the current transplant that the patient has received.

Completing Form: Record the number of the current transplant for this patient.

TRANSPLANT DATE

This is the date of the current transplant that the patient has received. The date should reflect the date of close incision for the procedure, and not that of date of incision.

Completing Form: Record the transplant date as month, day, and year (eg. 10/31/91).

1. PRE-OPERATIVE DATE

This is the date that the pre-operative readings were taken. This date may be on or before the transplant date, but should never be later than the transplant date.

Completing Form: Record the date as month, day, and year (eg. 10/31/91).

1.1-1.3 PRE-OPERATIVE $PaCO_2$; BARBITURATE INFUSION, CPP MONITORING

These data should be the most recent reading prior to transplant for amount of $PaCO_2$, rate and amount of barbiturate infusion, and the minimum CPP reading. CPP (cerebral perfusion pressure) is derived by the mean arterial pressure minus the intracranial pressure.

Completing Form:

Check the following if applicable:
1.1 $PaCO_2$ - record amount (mmHg).
1.2 Barbiturate infusion - record rate (mg/minute) and amount (mg/mL).
1.3 CPP monitoring - record minimum reading (mmHg).

2. INTRA-OPERATIVE DATA

The three stages during which data are to be collected are defined as:

Stage I (Hepatectomy): from incision time to crossclamp time.
Stage II (Anhepatic): from crossclamp time to release of portal vein.
Stage III (Reperfusion): from reperfusion of portal vein to end of case.

The data to be collected include:

2.1 Blood products - packed red blood cells or whole blood, fresh frozen plasma, platelets and cryoprecipitate. The total amounts given at each stage should be obtained.

2.2 Procoagulants - Amicar and/or Protamine. Determine whether either or both were given and the total amount at each stage.

2.3 CPP measurements - if ICP monitoring was used, obtain the minimum CPP readings at the specified times: incision, anhepatic -5 minutes, anhepatic +10 minutes, reperfusion -5 minutes, reperfusion +15 minutes and reperfusion +70 minutes.

Completing Form:

2.1 Packed red blood cells or whole blood, fresh frozen plasma, platelets, and cryoprecipitate: record total amounts given during each intraoperative stage. Blood products should be recorded in cc's. For each blood product at any stage, if none were given, record as 0.0.

2.2 Procoagulants used: check yes or no as appropriate. If yes, record amount of Amicar and/or Protamine given at each stage as mg/mL. If other units are used, convert to mg/mL. If none were given at any stage, record as 0.0.

2.3 Were CPP measurements taken: check yes or no as appropriate. If yes, record the minimum CPP at the time of incision, at 5 minutes prior to the anhepatic phase, at 10 minutes into the anhepatic phase, at 5 minutes before reperfusion, at 15 minutes after reperfusion, and at 70 minutes after reperfusion.