



STANDARD OPERATING PROCEDURES
STRINGING OPERATING ROOM TUBING ASSEMBLY
(Revised 29 April 1999) Mathew's C: Mathew/SOP/Stringing Operating Room Tubing Assembly.p65

PURPOSE

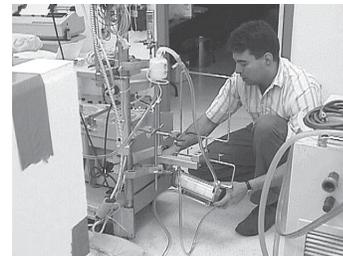
The purpose of this SOP is to describe the steps involved in stringing the tubing assembly onto the Operating Room roller pump array in preparation for a cryoprotective perfusion operation. Sterile technique should be used.

PROCEDURE (Refer to diagram for location guidance)

1. Open container "A" (whole body or neuro tubing pack), and spread sterile wrapping out on the floor. Save tubing diagrams for reference and for patient records.



2. Uncoil and remove tubing and components and lay out on sterile wrapping. Place blue, sterile-wrapped A/V (arterial/venous) loop and components on table above roller pumps.



3. Mount heat exchanger/oxygenator and blood filter.

4. String arterial pump shoe (soft tubing section) labeled "1 IN A/ 1 OUT A" (see diagram) in pump number 1 (arterial pump). Match the label on the tubing with the label on the pump. If the patient is "whole body", use the larger (3/8") pump shoe. If neuro, use the smaller pump shoe.

5. String **lower groove only** in ramp withdrawal pump shoe (soft tubing section) labeled "3B IN/3B OUT" in pump number 3 (ramp pump).

6. Lay waste bladder on floor near recirculation reservoir.

7. Matching the labels, connect the monitor line from blood filter labeled "C" to nipple at the top of the recirculating reservoir labeled "C".

8. Connect pump tubing end labeled "D" to nipple labeled "D" on the bottom of the recirculating reservoir.

9. Connect tubing end (from oxygenator bypass) labeled "E" to nipple labeled "E" on the bottom of the recirculating reservoir.

10. Connect tubing end (from venous return) labeled "F" to nipple labeled "F" on the bottom of the recirculating reservoir.

11. Connect the ramp generator withdrawal tube labeled "G" to the nipple at the bottom of the waste reservoir labeled "A or G". Reservoirs with this labelling can be used for either a concentrate reservoir ("A") or a waste reservoir ("G").

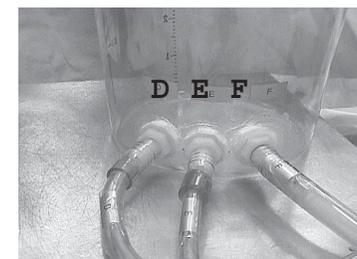
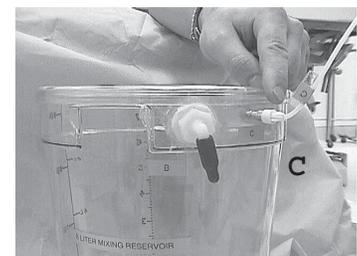
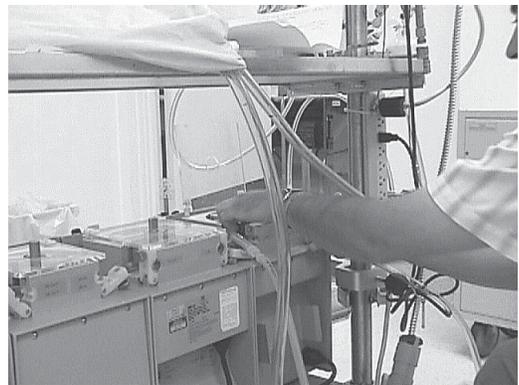
Note: Perfusate reservoirs come in various sizes. 60 liter reservoirs are usually used for whole body patients. 40 liter reservoirs are usually used for neuro patients. Small reservoirs are usually used for animals like dogs and cats.

12. Open container "B", spreading sterile wrapping out on the floor.

13. Uncoil and remove tubing and components.

14. Place wrapped cardiotomy sucker on table with A/V loop.

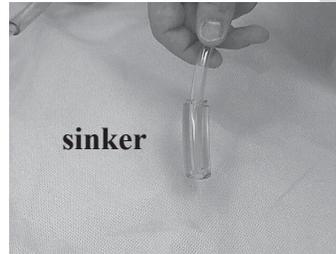
15. Hang cardiotomy filter in holder on perfusionist's right side



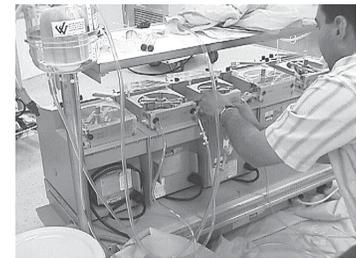
using rubber bands.

16. Hang the unfiltered perfusate line with sinker over the cardiotomy filter.

Note: This is the only line that is not labeled. It is not labeled because it will be placed directly into the perfusate.



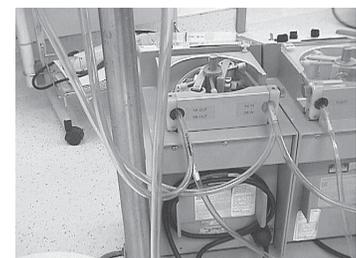
17. Lay (do not string) ramp addition pump shoe (soft tubing section) labeled "3A IN/3A OUT" (see diagram) on top of pump number 3 (ramp pump). Match the label on the tubing with the label on the pump. **Do not** string at this time because it will be used to filter the perfusate (See SOP titled "Perfusate Filtration").



18. String filtration pump shoe (soft tubing section) labeled "4 IN/4 OUT" (see diagram). Match the label on the tubing with the label on the pump.

Caution: Pump number 5, the cardiotomy pump, has two grooves. In steps 19 and 20 (below) be sure to use the appropriate groove ("B" first).

19. String cardiotomy pump shoe (soft tubing section) coming from the cardiotomy sucker labeled "5B IN/5B OUT" (see diagram). Match the label on the tubing with the label on the pump.

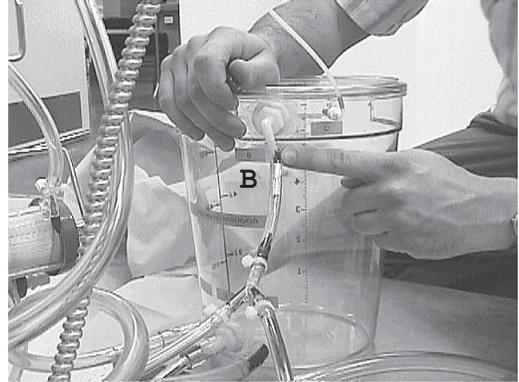


20. String cardiotomy pump shoe (soft tubing section) labeled "5A IN/5A OUT" leading to the mixing reservoir (see diagram). Match the label on the tubing with the label on the pump.

21. Connect tubing end leading from the ramp pump labeled "A" to the nipple labeled "A or G" on the bottom of the concentrate reservoir. Reservoirs with this labelling can be used for either a concentrate reservoir ("A") or a waste reservoir ("G"). This reservoir should be placed to the perfusionist's left.



22. Connect concentrate addition/cardiotomy return tubing labeled "B" to nipple labeled "B" on the recirculating reservoir (to the perfusionist's left).



23. Install Blanketrol lines on heat exchanger and gas line on oxygenator (see separate SOPs).

24. Double check entire system. Band all connections that are not already banded (at reservoirs and any tubing connections that were not banded prior to packaging and sterilization of tubing pack) to prevent leaks when system is under pressure.

25. When the unfiltered perfusate arrives, remove lid and place sinker in bottom of the mixing reservoir.
Caution: do not allow lid to pinch the tubing.

26. When filtration of both perfusates is complete, string ramp addition pump shoe (soft tubing section) labeled "3A IN/3A OUT" (see diagram) on pump number 3 (ramp pump). Match the label on the tubing with the label on the pump.