

CLAIMS

What is claimed is:

1. A rapidly insertable central catheter ("RICC"), comprising:
a catheter tube including:
a first section in a distal portion of the catheter tube formed of a first polymeric material having a first durometer; and
a second section proximal of the first section of the catheter tube formed of a second polymeric material having a second durometer less than the first durometer, the catheter tube having a column strength sufficient to prevent buckling of the catheter tube when inserted into an insertion site and advanced through a vasculature of a patient;
a suture wing disposed over a medial portion of the catheter tube;
a hub coupled to a proximal-end portion of the catheter tube; and
a number of extension legs extending from the hub equal to a number of lumens extending through the RICC.
2. The RICC of claim 1, wherein the catheter tube between the suture wing and the hub is a single catheter tube configured to abate bacterial ingress between a dressing applied over the suture wing and skin of the patient by enabling the dressing to be pinched more tightly around the single catheter tube than possible for multiple extension legs extending from suture wing-hub combinations common to existing central venous catheters or peripherally inserted central catheters.
3. The RICC of either claim 1 or 2, wherein the catheter tube between the suture wing and the hub is configured to mitigate patient discomfort from proximity of the number or extension legs to a head or neck of the patient by being flexible enough to enable the catheter tube to be bent away from the head or neck of the patient and secured to the patient.
4. The RICC of any claim of claims 1-3, wherein the first section of the catheter tube is polytetrafluoroethylene, polypropylene, or polyurethane.
5. The RICC of any claim of claims 1-4, wherein the second section of the catheter tube is bump tubing, the suture wing disposed over a bump in the second section of the catheter

tube such that the catheter tube proximal of the suture wing has a larger outer diameter than the catheter tube distal of the suture wing.

6. The RICC of any claim of claims 1-4, wherein the catheter tube further includes a third section proximal of the second section of the catheter tube having a larger outer diameter than the second section of the catheter tube, the suture wing disposed over a proximal-end portion of the second section of the catheter tube and a distal-end portion of the third section of the catheter tube.

7. The RICC of claim 6, wherein the third section of the catheter tube is polyvinyl chloride, polyethylene, polyurethane, or silicone.

8. The RICC of any claim of claims 1-7, wherein the second section of the catheter tube is polyvinyl chloride, polyethylene, polyurethane, or silicone.

9. The RICC of any claim of claims 1-8, wherein the RICC is a triluminal catheter including a trifurcated hub having three extension legs extending therefrom, each extension leg of the three extension legs including a Luer connector coupled to a proximal-end portion of the extension leg.

10. The RICC of claim 9, wherein the RICC includes a first lumen extending from an opening in a proximal end of a first Luer connector to an opening in a distal end of the first section of the catheter tube, a second lumen extending from an opening in a proximal end of a second Luer connector to a first eyelet in the second section of the catheter tube, and a third lumen extending from an opening in a proximal end of a third Luer connector to a second eyelet in the second section of the catheter tube.

11. The RICC of any claim of claims 1-8, wherein the RICC is a diluminal catheter including a bifurcated hub having two extension legs extending therefrom, each extension leg of the two extension legs including a Luer connector coupled to a proximal-end portion of the extension leg.

12. The RICC of claim 11, wherein the RICC includes a first lumen extending from an opening in a proximal end of a first Luer connector to an opening in a distal end of the first section of the catheter tube and a second lumen extending from an opening in a proximal end of a second Luer connector to an eyelet in the second section of the catheter tube.

13. A rapidly insertable central catheter ("RICC"), comprising:
a catheter tube including:
a first section in a distal portion of the catheter tube formed of a first polymeric material having a first durometer; and
a second section proximal of the first section of the catheter tube formed of bump tubing of a second polymeric material having a second durometer less than the first durometer, the catheter tube having a column strength sufficient to prevent buckling of the catheter tube when inserted into an insertion site and advanced through a vasculature of a patient without use of a Seldinger technique;
a suture wing disposed over a medial portion of the catheter tube, the suture wing disposed over a bump in the second section of the catheter tube such that the catheter tube proximal of the suture wing has a larger outer diameter than the catheter tube distal of the suture wing;
a hub coupled to a proximal-end portion of the catheter tube; and
three extension legs extending from the hub, each extension leg of the three extension legs having a Luer connector coupled to a proximal-end portion of the extension leg.

14. The RICC of claim 13, wherein a first lumen extends from an opening in a proximal end of a first Luer connector to an opening in a distal end of the first section of the catheter tube, a second lumen extends from an opening in a proximal end of a second Luer connector to a first eyelet in the second section of the catheter tube, and a third lumen extends from an opening in a proximal end of a third Luer connector to a second eyelet in the second section of the catheter tube.

15. The RICC of either claim 13 or 14, wherein the catheter tube between the suture wing and the hub is configured to abate bacterial ingress between a dressing applied over the suture wing and skin of the patient by enabling the dressing to be pinched more tightly around the catheter tube than possible for multiple extension legs extending from suture wing-hub combinations common to existing central venous catheters or peripherally inserted central catheters.

16. The RICC of any claim of claims 13-15, wherein the catheter tube between the suture wing and the hub is configured to mitigate patient discomfort from proximity of the

number or extension legs to a head or neck of the patient by being flexible enough to enable the catheter tube to be bent away from the head or neck of the patient and secured to the patient.

17. A method of a rapidly inserted central catheter (“RICC”), comprising:
creating an insertion site to access a vasculature of a patient with a needle disposed within a lumen of the RICC, the RICC including a catheter tube comprising:
a first section in a distal portion of the catheter tube formed of a first polymeric material with a first durometer and
a second section proximal of the first section of the catheter tube formed of a second polymeric material with a second durometer less than the first durometer;
inserting a distal-end portion of the catheter tube into the insertion site; and
advancing the catheter tube through the vasculature of the patient, the advancing including further inserting the catheter tube into the insertion site without having to use a Seldinger technique due to the catheter tube having a column strength sufficient to prevent buckling of the catheter tube when inserted into the insertion site and advanced through the vasculature of the patient.

18. The method of claim 17, further comprising withdrawing the needle from the lumen of the RICC after creating the insertion site and inserting at least some of the first section of the catheter tube into the insertion site.

19. The method of either claim 17 or 18, wherein the insertion site is at a right subclavian vein or a right internal jugular vein.

20. The method of claim 19, wherein advancing the catheter tube through the vasculature of the patient includes advancing the first section of the catheter tube through the right subclavian vein or the right internal jugular vein, a right brachiocephalic vein, and into a superior vena cava.

21. A rapidly insertable central catheter (“RICC”), comprising:
a catheter tube including:
a first section in a distal portion of the catheter tube formed of a first polymeric material; and

a second section proximal of the first section of the catheter tube formed of a second polymeric material having a substantially equal durometer to the first polymeric material, the catheter tube having a column strength sufficient to prevent buckling of the catheter tube when inserted into an insertion site and advanced through a vasculature of a patient;

a suture wing disposed over a medial portion of the catheter tube;

a hub coupled to a proximal-end portion of the catheter tube; and

a number of extension legs extending from the hub equal to a number of lumens extending through the RICC.