CLAIMS

We claim:

1. An obturator assembly, comprising:

a hub forming a central passage;

a catheter having a distal end and an opposing proximal end, the catheter including a small-bore connector at the proximal end coupled to the hub, the catheter forming a lumen extending between the distal end and the proximal end of the catheter, the lumen in fluid communication with the central passage;

an obturator movably positioned within the lumen, the obturator movable between a first position and a second position, the obturator including a distal end having a tip portion,

wherein, with the obturator in the first position, the distal end of the obturator limits fluid flow through the lumen and, with the obturator in the second position, the distal end of the obturator provides a fluid flow path through the lumen; and

a locking collar operatively coupled to the hub, the locking collar configurable in a locked configuration to prevent movement of the obturator within the lumen and in an unlocked configuration to allow movement of the obturator within the lumen, wherein, in the locked configuration, the locking collar is configured to prevent movement of the obturator within the lumen with the obturator in the first positon or the second position, wherein the locking collar comprises a tab configured to selectively interfere with a depression formed in the obturator with the locking collar in the locked configuration.

2. The obturator assembly of claim 1, wherein the obturator is movable in one of a distal direction with respect to the distal end of the catheter or a proximal direction with respect to the distal end of the catheter from the first position to the second position.

3. The obturator assembly of claim 1, wherein the locking collar is biased toward the locked configuration with the obturator in one of the first position or the second position.

4. The obturator assembly of claim 1, wherein the obturator has a central axis extending between the distal end and a proximal end of the obturator, at least a portion of the distal end having one of a symmetrical profile with respect to the central axis or an asymmetrical profile with respect to the central axis.

5. The obturator assembly of claim 1, wherein the hub comprises a small-bore connector configured to couple the hub to a tube.

6. The obturator assembly of claim 1, wherein, with the obturator in the first position, the tip portion is positioned within the lumen to prevent fluid flow into the lumen and, with the obturator in the second position, the tip portion extends from the catheter in a distal direction to allow fluid flow into the lumen.

7. The obturator assembly of claim 1, wherein, with the obturator in the first position, the tip portion is positioned within the lumen to prevent fluid flow into the lumen and, with the obturator in the second position, the tip portion extends into the lumen of the catheter in a proximal direction to allow fluid flow into the lumen.

8. The obturator assembly of claim 1, wherein a proximal end of the obturator forms a channel in fluid communication with the lumen, the obturator assembly further comprising a seal positioned about an outer periphery of the proximal end of the obturator and contacting an inner surface of the small-bore connector at the proximal end of the catheter.

9. The obturator assembly of claim 8, wherein the seal comprises an O-ring seal positioned within an annular slot formed in the inner surface of the small-bore connector.

10. An obturator assembly, comprising:

an obturator movably positioned within a lumen of a device, the obturator movable between a first position and a second position, the obturator comprising a distal tip portion, wherein, with the obturator in the first position, the distal tip portion limits fluid communication through the lumen and, with the obturator in the second position, the distal tip portion provides fluid communication through the lumen; and

a locking collar configurable in a locked configuration to prevent movement of the obturator within the lumen and in an unlocked configuration to allow movement of the obturator within the lumen, wherein, in the locked configuration, the locking collar is configured to prevent movement of the obturator within the lumen with the obturator in the first positon or the second position, wherein the locking collar comprises a tab configured to selectively interfere with a depression formed in the obturator with the locking collar in the locked configuration.

11. The obturator assembly of claim 10, wherein the obturator is movable in at least one of a distal direction with respect to a distal end of the device or a proximal direction with respect to the distal end of the device from the first position to the second position.

12. The obturator assembly of claim 10, further comprising:

a hub forming a central passage in fluid communication with the lumen.

13. The obturator assembly of claim 10, wherein the collar is biased toward the locked configuration with the obturator in one of the first position or the second position.

14. The obturator assembly of claim 10, wherein the obturator has a central axis extending between the distal end and the proximal end of the obturator, at least a portion of the distal end having one of a symmetrical profile with respect to the central axis or an asymmetrical profile with respect to the central axis.

15. The obturator assembly of claim 10, wherein the obturator is configured to move automatically in a distal direction toward the second position in response to a pressure causing fluid to flow through the lumen in the distal direction to allow the fluid to be expressed from the lumen.

16. The obturator assembly of claim 15, wherein, with the pressure removed, the obturator is configured to move automatically toward the first position.

17. The obturator assembly of claim 1, wherein the tab is configured to selectively interfere with the depression in response to the obturator being in the first position, wherein the tab is configured to selectively interfere with another depression formed in the obturator in response to the obturator being in the second position.