

CLAIMS:

1. A catheter assembly, comprising:

a catheter adapter comprising a body that forms a distally oriented stop, a nose extending distally from the stop, a strain relief element formed around a distal end of the nose, and a catheter that extends distally from the nose, wherein the nose is generally cylindrical and the strain relief element is formed of a flexible material;

a first strain relief rib disposed on a bottom of the nose, a second strain relief rib disposed on the nose, and a third strain relief rib disposed on the nose, wherein each of the first strain relief rib, the second strain relief rib, and the third strain relief rib extends along a longitudinal axis of the catheter adapter from the strain relief element to the stop and has a height from a circumference of the nose, the height of the first strain relief rib being greater than the height of the second strain relief rib and the height of the third strain relief rib;

a needle secured within the catheter adapter and extending through the strain relief element and the catheter;

a needle cover removably coupled around the nose of the catheter adapter, wherein an inner surface of the needle cover contacts and compresses the first strain relief rib, the second strain relief rib, and the third strain relief rib to thereby secure the needle cover to the nose.

2. The catheter assembly of claim 1, wherein the flexible material comprises an elastomer.

3. The catheter assembly of claim 1, wherein the flexible material comprises a thermoplastic elastomer.

4. The catheter assembly of claim 1, wherein the nose is constructed of a rigid or semi-rigid material.

5. The catheter assembly of claim 1, wherein the strain relief element is disposed on a distalmost surface of the nose.

6. The catheter assembly of claim 1, wherein the stop is configured to prevent proximal movement of the needle cover.
7. The catheter assembly of claim 1, wherein the catheter adapter includes a securement platform.
8. The catheter assembly of claim 7, wherein the securement platform comprises a first wing and a second wing.