portion **12** has a top **14** and a bottom **15**. The body contains first portion **16** and a second portion **17** which is at an angle with respect to the first portion **16**. A preferred angle is 45°, but other angles are contemplated as being useable in the present invention. The body **12** contains a curved catheter channel **13** that tapers from the top **14** to the bottom **15**. A ring **18** extends from the top **14**. A cap **19** is snap fitted or bonded to the top **14** by being fitted over the ring **18** and fitted over a shoulder **20**. The cap **19** has an access port **22**, the inner wall **24** of which is a standard or modified luer taper. A luer thread **26** extends from the exterior of the cap **19**.

The body **12** is preferably made of any of a number of suitable materials, such as high density polyethylene. The material should be rigid, biocompatible and cleanable.

An elastomeric unitary disc-shaped hemostatic valve **30** is seated within the ring **18** and rests on a shoulder **32** and comprises a centrally positioned access port hole **34** extending partially within the valve **30**, and a Y-slit **36**, as shown in FIGS. **3** and **4**. Preferably, a beveled inward-protruding lip **38** extends annularly in the hole **34** which acts as an additional seal, enhancing the ability of the valve **30** to maintain hemostasis while catheters are being inserted, removed or maintained within the sheath introducer **10**. The Y-slit **36** is aligned axially with the hole **34** and permits entry of a catheter **40** or similar device into the channel **13** through the hole **34** and forms a fluid-tight seal when no catheter is present and also when a catheter is inserted into the slit **36**. The slit **36** also aligns the catheter **40** for reception within the channel **13**.

A cannula **50** extends from the bottom **15** and is in fluid communication with the channel **13**. The cannula **50** is at an angle with respect to the hole **34** and lies close to the back surface **52** of the body **12**, In this manner the cannula **50** is off-axis with respect to the upper portion of the channel **13**. The purpose of the offset cannula **50** is to maintain a closer alignment with the skin after positioning. The distal end **54** of the cannula **50** is tapered slightly for easier introduction into a vessel and to adhere closely to the exterior surface of a vessel dilator.

A sideport channel **60** is in fluid communication with and extends from the channel **13** and is angled toward the bottom **15**. A boss **62** extends downward toward the bottom **16**, i.e., perpendicular with respect to the axis of the first portion **16** so as to prevent the tubing **64** from possibly interfering with any insertion operations at the top **14** and is in fluid communication with the sideport channel **60** and connects to a sidepert tubing **64**, which is connectable to a conventional stopcock **66** or other device. Optionally, as shown in FIGS. **6** and **7**, the boss **62** is rotated about 90° (although any suitable angle will suffice) in order to be orthogonal with respect to the cannula and the top **14**. It is also possible to eliminate the sideport channel **60** and boss **62** altogether, if desired.

A conventional straight dilator can be used or one can adapted for use with the present invention, as shown in FIG. **8**, by molding a dilator **70** with an angled bend, generally designated at **72**, which matches the angle of the body **12**. The angled dilator **70** design permits easier introduction of the dilator into the sheath introducer **10** and reduces the possibility of kinking. Although the angle of the dilator **70** is not critical, it is desirable for the angle to be compatible with the angle of the body **12**.

The sheath introducer **10** of the present invention is optimally used in a TIPS procedure although other catheterization procedures can employ the invention. Such procedures have been described in the literature and are well known in the art. Briefly, however, a blood vessel (such as the jugular) is located by palpating the skin above the desired vessel. A needle is inserted into the vessel. A guidewire is introduced through the needle and into the vessel. The needle is then removed leaving the guidewire in place. A vessel dilator **70** with a tapered end slides into a sheath introducer **10** via the hole **34** (as shown in FIG. **9**) and both advance over the wire. The dilator **70** and sheath introducer **10** are then inserted into the vessel. The vessel dilator **70** and wire are then removed leaving the cannula **50** of the sheath introducer **10** remaining in the vessel.

While the sheath introducer **10** of the present invention is maintained at the entry site, other objects may be inserted and withdrawn from the access port **24**, such as but not limited to stents, catheters, shunts, needles, syringes, and the like. The angled body **12** of the present invention permits easier insertion of objects into the hole **34** because the hole **34** is angled away from the skin and the neck area. It also improves catheter manipulation, patient comfort and reduces the likelihood of cannula damage or kinking. The offlet of the cannula **50** from the body **12** minimizes the bend between the body **12** and the skin. The angled and/or rotated sideport boss **62** permits unobstructed access to the hole **34**.

While the invention has been described in connection with certain preferred embodiments, it is not intended to limit the scope of the invention to the particular forms set forth, but, on the contrary, it is intended to cover such alternatives, modifications, and equivalents as may be included within the spirit and scope of the invention as defined by the appended claims.

We claim:

1. A hemostatic sheath introducer, comprising:

a tubular body having a first curved lumen extending therethrough and a top and a bottom end said first lumen tapering from said top to said bottom, said top being angled with respect to said bottom;

a cap having an opening therein sized to be fitted onto said top end;

an elastomeric valve having an opening and a slit defined therein adapted for receiving an elongated member in a slidingly sealable relationship, said valve being receivable within said top and maintained in place by said cap;

a cannula extending from said bottom, said cannula being in fluid communication with said first lumen and said cannula being offset from the center of said body; and,

a sideport comprising a second lumen extending laterally from said first lumen to said sidewall and a boss extending outward from a sideport comprising a second lumen extending laterally frown said first lumen and a boss extending outward from said body, and said second lumen being in fluid communication with said first lumen.

2. The sheath introducer of claim **1**, wherein a portion of said cannula is tapered.

3. The sheath introducer of claim **1**, wherein said slit is Y-shaped in cross-section and is capable of maintaining a fluid tight seal when a tube is slidingly inserted therein while permitting movement of said tube.

4. The sheath introducer of claim **1**, wherein a tube is connected to said boss.

5. The sheath introducer of claim **4**, wherein said tube is connected to a stopcock.

6. The sheath introducer of claim **1**, wherein said boss is angled downward toward said bottom.