an inner member slidably disposed within the first lumen, the inner member comprising a proximal end adjacent the outer member proximal end, and a distal end within the balloon interior adjacent the balloon outlet;

a sealing member on the inner member distal end;

a handle on the outer member proximal end; and

an actuator on the handle coupled to the inner member for directing the inner member between a proximal position wherein the sealing member is spaced from the outlet such that fluid introduced through the first lumen passes through the outlet into a region around the apparatus, and a distal position wherein the sealing member is received at least partially within the balloon distal end to substantially seal the outlet.

31. The apparatus of claim 30, further comprising a tensioning element coupled between a stop in the balloon distal end and the sealing member for biasing the sealing member towards the proximal position.

32. The apparatus of claim 30, further comprising a tensioning element coupled between the proximal and distal ends of the balloon for biasing the balloon distal end distally.

~~33. A method for treating a body lumen of a patient using an apparatus~~ comprising an outer member including a first lumen extending between a proximal end and an outlet in a distal end thereof, an inner member slidable within the first lumen including a distal portion extending beyond the outlet, a treatment element on the distal portion, and a sealing member proximal to the treatment element on the distal portion, the method comprising:

introducing the distal end of the outer member into a body lumen with the inner member in a proximal position such that the sealing member substantially seals the outlet;

directing an actuator on a proximal end of the apparatus to move the inner member to a distal position directing the sealing member away from the outlet;

at least one of delivering fluid through the first lumen such that the fluid passes through the outlet into the body lumen and aspirating fluid from the body lumen into the outlet and through the first lumen; and

~~performing a procedure within the body lumen with the treatment element.~~

34. The method of claim 33, wherein the treatment element comprises a balloon, and wherein the procedure comprises:

directing the inner member towards the proximal position such that the sealing member substantially seals the outlet and one or more passages in the sealing member communicate between the first lumen and an interior of the balloon; and

delivering fluid through the first lumen with the outlet substantially sealed, thereby delivering fluid through the one or more passages into the balloon interior to expand the balloon within the body lumen.

35. The method of claim 34, further comprising:

directing the balloon to an expanded helical shape within the body lumen; and

directing the balloon along a wall of the body lumen in the expanded helical shape to remove material from the wall of the body lumen.

36. The method of claim 34, wherein the treatment element further comprises a prosthesis carried on the distal portion over the balloon, and wherein the prosthesis is expanded within the body lumen when the balloon is expanded.

37. The method of claim 34, wherein the balloon is expanded until the balloon contacts a wall of the body lumen, the method further comprising delivering energy via the balloon to tissue adjacent the wall of the body lumen.

38. The method of claim 34, wherein the balloon is expanded until the balloon contacts a wall of the body lumen, thereby delivering one or more agents carried by the balloon to tissue adjacent the wall of the body lumen.

39. The method of claim 34, wherein the treatment element comprises a carrier on the balloon comprising one or more diagnostic or therapeutic agents, and wherein the carrier is expanded within the body lumen when the balloon is expanded.

40. The method of claim 33, wherein the treatment element comprises a balloon, and wherein the procedure comprises:

directing the inner member towards the proximal position such that the sealing member partially obstructs the outlet; and

delivering fluid through the first lumen such that some of the fluid exits the outlet into the body lumen and some of the fluid is delivered through one or more passages in the sealing member into an interior of the balloon to partially expand the balloon within the body lumen.

41. A method for treating a body lumen of a patient using a balloon apparatus comprising an outer member including a first lumen extending between proximal and distal ends thereof, an inner member slidable within the first lumen, a balloon attached to a distal end of the inner member beyond the outer member distal end, the method comprising:

introducing the distal end of the outer member into a body lumen with the balloon in a contracted condition and the inner member in a proximal position such that a sealing member on the inner member substantially seals an outlet in the outer member distal end communicating with the first lumen;

directing an actuator on a proximal end of the apparatus to move the inner member to a distal position consequently directing the sealing member away from the outlet;

delivering fluid through the first lumen such that the fluid passes through the outlet into the body lumen;

directing the inner member towards the proximal position to substantially seal the outlet with the sealing member such that one or more passages in the sealing member communicate between the first lumen and an interior of the balloon; and

delivering fluid through the first lumen with the outlet substantially sealed, thereby delivering fluid through the one or more passages into the balloon interior to expand the balloon from the contracted condition to an enlarged condition.

42. The method of claim 41, wherein a tensioning element is coupled between the inner and outer members, the tensioning element biasing the inner member proximally to enhance the sealing member sealing the outlet.

43. A method for treating a body lumen of a patient using a balloon apparatus comprising an outer member including a first lumen extending between proximal and distal ends thereof, an inner member slidable within the first lumen, and a balloon comprising a

proximal end attached to the outer member distal end, a distal end including an outlet and an interior communicating with the first lumen and the outlet, the method comprising:

introducing the distal end of the outer member into a body lumen with the balloon in a contracted condition and the inner member in a first position such that the outlet is substantially sealed by a sealing member on the inner member distal end;

directing an actuator on a proximal end of the apparatus to move the inner member to a second position consequently directing the sealing member away from the outlet to open the outlet;

delivering fluid through the first lumen such that the fluid passes through the balloon interior and exits the open outlet into the body lumen;

directing the inner member towards the first position to substantially seal the outlet with the sealing member; and

delivering fluid through the first lumen with the outlet substantially sealed, thereby expanding the balloon from the contracted condition to an enlarged condition.