

[54] INDWELLING URETERAL STENT PLACEMENT APPARATUS

[75] Inventor: Frederick D. Roemer, Bloomington, Ind.

[73] Assignee: Vance Products Incorporated, Spencer, Ind.

[21] Appl. No.: 258,832

[22] Filed: Oct. 17, 1988

[51] Int. Cl.<sup>5</sup> ..... A61M 25/00

[52] U.S. Cl. .... 604/8; 604/281

[58] Field of Search ..... 604/8, 281

[56] References Cited

U.S. PATENT DOCUMENTS

|           |         |                        |         |
|-----------|---------|------------------------|---------|
| 3,938,529 | 2/1976  | Gibbons .              |         |
| 3,995,642 | 12/1976 | Adair .                |         |
| 4,068,660 | 1/1978  | Beck .                 |         |
| 4,212,304 | 7/1980  | Finney .               |         |
| 4,250,881 | 2/1981  | Smith .                |         |
| 4,350,161 | 9/1982  | Davis, Jr. ....        | 251/339 |
| 4,531,933 | 7/1985  | Norton et al. ....     | 604/8   |
| 4,571,239 | 2/1986  | Heyman ....            | 604/54  |
| 4,581,019 | 4/1986  | Curelaru et al. ....   | 604/164 |
| 4,610,657 | 9/1986  | Densow ....            | 604/8   |
| 4,610,671 | 9/1986  | Luther ....            | 604/168 |
| 4,643,716 | 2/1987  | Drach ....             | 604/8   |
| 4,671,795 | 6/1987  | Mulchin ....           | 604/281 |
| 4,699,611 | 10/1987 | Bowden ....            | 604/51  |
| 4,713,049 | 12/1987 | Carter ....            | 604/8   |
| 4,757,827 | 7/1988  | Buchbinder et al. .... | 128/772 |
| 4,787,884 | 11/1988 | Goldberg ....          | 604/8   |

Primary Examiner—C. Fred Rosenbaum

Assistant Examiner—C. Maglione  
Attorney, Agent, or Firm—Woodard, Emhardt, Naughton, Moriarty & McNett

[57] ABSTRACT

An indwelling ureteral stent positioning apparatus is provided for allowing single intrusion placement of a stent in the ureter of a patient. The apparatus is pre-assembled and includes a wire guide with floppy tip. The stent is positioned about the wire guide adjacent to the floppy tip of the wire guide, and is adjustably situated on the wire guide to expose a pre-determined length of the floppy tip for insertion into the patient. The stent is a dual open-ended tubular stent having a resilient retentive curved circular or pigtail shape at each end for retention in the kidney and bladder. A positioner is conveyed on the wire stent until the end of the positioner abuts the anatomically distal end of the stent. A pin-vise clamp abuts the external end of the positioner and releasably engages the wire guide to stabilize the apparatus during insertion. When used to position the stent within the ureter, the apparatus is conveyed along the ureter until the floppy tip is within the renal collecting system. The positioner is advanced along the wire guide to push the anatomically proximal end of the stent over and beyond the floppy tip so that the retentive coil forms within the kidney. The pin-vise clamp is released to allow the wire guide to be withdrawn until it passes the anatomically distal end of the stent, wherein the retentive coil shape is formed within the bladder. With the stent fully indwelling, the positioner and wire guide are removed from the patient.

8 Claims, 2 Drawing Sheets

