Claims

1. An airway management device, comprising:

a body (6) including an external shell moulded from a polypropylene copolymer (PP) blended with a thermoplastic elastomer (TPE) of styrene-ethylene/butylene-styrene (SEBS), the external shell extending from a proximal opening to a distal tip of the body (6), the external shell having a curved portion (35) and a linear portion (37)~~,~~;

a first over-mould of SEBS comprising a posterior contour (35) and a distal contour (34) on the external shell;

wherein the first over-mould comprises a distal perimeter (26) defining a first opposed edge of an over-moulded cuff membrane (25) continuing tangentially from said perimeter (26) as a toroidal curve whose end point is in spaced relation and normal to the first opposed edge, the end points defining an open posterior (27) perimeter or second opposed edge and a linear portion (37) over-moulding a proximal end such that said curved portion (35) and the linear portion (37) are joined as a single moulding by planar sealing voids (36) to first and second sides of an intermediate strip (38);

a second over-mould of SEBS closing said open length of membrane (27), forming an inflatable cuff; and

said inflatable cuff is arranged to be deflated to present a flat wedge shape facilitating insertion between the teeth, past the tongue and through the palatoglossal arch during insertion.

2. The airway management device of claim 1, further including an intermediate strip (38) moulded from a polypropylene copolymer (PP) attached to said external shell intermediate to the curved portion (35) and the linear portion (37).

~~3. The airway management device of claim 1, further including a first over-mould of SEBS comprising a posterior contour (35) and a distal contour (34) on the external shell.~~

~~4. The airway management device of claim 3, wherein the first over-mould comprises a distal perimeter (26) defining a first opposed edge of an over-moulded cuff membrane (25) continuing tangentially from said perimeter (26) as a toroidal curve whose end point is in spaced relation and normal to the first opposed edge, the end points defining an open posterior (27) perimeter or second opposed edge and a linear portion (37) over-moulding a proximal end such that said curved portion (35) and the linear portion (37) are joined as a single moulding by planar sealing voids (36) to first and second sides of an intermediate strip (38).~~

~~5. The airway management device of claim 4, further including a second over-mould of SEBS closing said open length of membrane (27), forming an inflatable cuff.~~

~~6~~3. The airway management device of claim ~~5~~1, wherein the posterior contour (35) of the body (6) is adapted to be located within a hypopharynx and a distal end (2) is adapted to be located within an upper oesophageal sphincter creating an oesophageal seal, wherein immediately superior to a distal opening (20), and the anterior compound curvature (33) of the external shell is an internal posterior surface of a passage or gastric drain tube (24) reducing the bulk of the distal tip (2).

~~7.~~4. The airway management device of claim ~~6~~3, further including a surrounding contour (34) over-moulding said anterior compound curvature (33) of the external shell and which is adapted for locating and pressing against the hypopharynx, the distal to proximal full length configuration of the external shell providing resistance against displacement of the distal opening (20) superiorly from increasing oesophageal pressure (70).

~~8.~~5. The airway management device of claim ~~6~~3, wherein the drain tube (24) and a drain tube distal opening (20) are integral with a distal posterior contour (34) and where the said drain tube (24) is not surrounded by an annular volume of said inflatable cuff.

~~9.~~6. The airway management device of claim ~~6~~3, further including a closed tubular section (30) forming a chamber (32) providing a space for a distal portion of the inflatable cuff with a posterior displacement when inflated.

~~10.~~7. The airway management device of claim ~~6~~3, wherein through any horizontal cross section of said inflatable cuff, first and second edges (27), for at least the length of the distal portion of the gastric drain tube (31), are maintained parallel to a median plane (10) of the curved portion (35) such that the width between the first and second edges (27) after second over-moulding is equal to an outer diameter of the distal drain tube (31).

~~11.~~8. The airway management device of claim ~~10~~7, wherein a curvature of the inflatable cuff membrane (25) between said first (26) and second (27) opposed edges is a single contiguous curve of uniform durometer hardness, sealing posteriorly against a hypopharynx and anteriorly against a laryngeal inlet without adhesive joint.

~~12~~9. A method of forming the airway management device according to claim 1, comprising:

providing a removable connector/adaptor (39) on the linear portion to reduce a length from a proximal opening (42) of the body (6) through to a trachea (68), thereby providing additional depth of insertion of a distal tip (63) of an endotracheal tube.

~~13~~10. A method of forming the airway management device according to claim 1, comprising:

providing a finger stopper (60) creating a fixed position to rest a thumb during insertion, to grip a proximal end (37) when removing the device after intubation and to act as a depth indicator, with reference to teeth, when the device is in situ.