

I Claim:

1. An umbilical splint (10) adapted to shape an umbilicus by applying pressure to a tissue of the umbilicus, the umbilical splint (10) comprising:
an insertion portion (20) extending in a longitudinal direction (LD) and
5 terminating at a insertion end (22) for insertion into an umbilicus (3), the insertion portion (20) comprising:
a bulbous section (24) having a bulbous circumference, the bulbous section (24) near the insertion end (22);; andan external flange (40) coupled to the insertion portion (22), the external flange comprising (40):an underside surface (44) facing
10 the insertion end (22) of the insertion portion (20), andan exterior surface (42), opposite the underside surface (44)
characterized in that
theinsertion portion (20) comprises a retaining section (26) having a retaining circumference less than the bulbous circumference,
15 the bulbous section (24) is disposed between the retaining section (26) and the insertion end (22), and the retaining section (26) is configured to engage a lip (7) of the umbilicus (3) suchthat the insertion portion (20) is retained within the umbilicus (3).
- 20 2. The umbilical splint (10) as claimed in claim 1, wherein the longitudinal direction (LD) of the insertion end (22) is normal to the underside surface (44) of the external flange (40).
3. The umbilical splint (10)as claimed in claim 1, wherein the underside surface
25 (44) of the external flange (40) is substantially planar such that the underside surface (44) is operable to lay against an abdominal surface surrounding the umbilicus (3).
4. The umbilical splint (10) as claimed in claim 1, wherein the insertion end (22)
30 is substantially planar.

5. The umbilical splint (10) as claimed in claim 1, comprising a medicament applied to the insertion portion (20) of the umbilical splint (10).
6. The umbilical splint (10) as claimed in claim 1, comprising a silicone gel sheet applied to the insertion portion (20) of the umbilical splint (10).
7. The umbilical splint (10) as claimed in claim 1, wherein a ratio of the bulbous circumference to the retaining circumference is between 1.01 and 1.4.
8. The umbilical splint as claimed in claim 1, wherein the bulbous circumference is substantially ovular in shape.
9. The umbilical splint (10) as claimed in claim 1, wherein the umbilical splint (10) is manufactured out of a rigid material.
10. The umbilical splint (10) as claimed in claim 1, wherein a bottom bulbous portion is formed of a material selected from the group consisting of hard plastic, glass, metal, medical ceramic, medical plastic.
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I Claim:

- ~~1. Use of an umbilical splint for shaping an umbilicus after an abdominal operation, the umbilical splint comprising:
an insertion portion extending in a longitudinal direction and terminating at an insertion end for insertion into the umbilicus;
wherein the insertion portion comprises a bulbous section near the insertion end,
wherein the bulbous section is operable to apply pressure to a tissue of the umbilicus after the abdominal operation, and
wherein the insertion portion is configured to engage the umbilicus such that the umbilical splint is retained within the umbilicus.~~
- ~~2. The use of the umbilical splint as in claim 1, wherein the insertion portion is used to counteract scar contracture of the umbilicus by applying pressure to a scar.~~
- ~~3. The use of the umbilical splint as in claim 1, wherein the bulbous section has a bulbous circumference and the insertion portion further comprises:
a retaining section having a retaining circumference,
wherein the bulbous section is between the retaining section and the insertion end, and
wherein the retaining circumference is less than the bulbous circumference.~~
- ~~4. The use of the umbilical splint as in claim 3, wherein a ratio of the bulbous circumference to the retaining circumference is between 1.0 and 1.4.~~
- ~~5. The use of the umbilical splint as in claim 3, wherein the bulbous circumference is substantially ovular in shape.~~
- ~~6. The use of the umbilical splint as in claim 3, wherein the retaining section is configured to engage a lip of the umbilicus.~~

~~7. The use of the umbilical splint as in claim 3, wherein the umbilical splint further comprises an external flange coupled to the insertion portion, the external flange comprising:
an underside surface facing the insertion end of the insertion portion, and an exterior surface, opposite the underside surface.~~

~~8. The use of the umbilical splint as in claim 7, wherein the underside surface faces towards the insertion end for contacting an abdominal tissue surrounding the umbilicus.~~

~~9. The use of the umbilical splint as in claim 8, wherein the longitudinal direction of the insertion end is normal to the underside surface of the external flange; and wherein the underside surface of the external flange lays against the abdominal tissue surrounding the umbilicus and the external flange extends beyond an opening of the umbilicus.~~

~~10. The use of the umbilical splint as in claim 1, wherein the umbilical splint further comprises a medicament applied to the insertion portion.~~

~~11. The use of the umbilical splint as in claim 1, wherein the umbilical splint further comprises a silicone gel sheet applied to the insertion portion.~~

121. An umbilical splint (10) adapted to shape an umbilicus by applying pressure to a tissue of the umbilicus, the umbilical splint (10) comprising:

an insertion portion (20) extending in a longitudinal direction (LD) and terminating at an insertion end (22) for insertion into an umbilicus (3), the insertion portion (20) comprising:

a bulbous section (24) having a bulbous circumference, the bulbous section (24) near the insertion end (22); ~~a retaining section having a retaining circumference less than the bulbous circumference, wherein the bulbous section is disposed between the retaining section and the insertion end;~~ and an external flange (40) coupled to the insertion portion (22), the external flange comprising (40): an underside surface (44) facing the insertion end (22) of the insertion portion (20), and an exterior surface (42), opposite the underside surface (44)
characterized in that

the insertion portion (20) comprises a retaining section (26) having a retaining circumference less than the bulbous circumference,

the bulbous section (24) is disposed between the retaining section (26) and the insertion end (22), and the retaining section (26) is configured to engage a lip (7) of the umbilicus (3) such that the insertion portion (20) is retained within the umbilicus (3).

~~13. The umbilical splint of claim 12, wherein the insertion portion enables the umbilical splint to shape the umbilicus by applying pressure to a tissue of the umbilicus after an abdominal operation.~~

~~14. The umbilical splint of claim 12, wherein the retaining section is configured to engage a lip of the umbilicus such that the insertion portion is retained within the umbilicus.~~

~~152. The umbilical splint (10) ofas claimed in claim 121, wherein the longitudinal direction (LD) of the insertion end (22) is normal to the underside surface (44) of the external flange (40).~~

~~163. The umbilical splint (10) ofas claimed in claim 121, wherein the underside surface (44) of the external flange (40) is substantially planar such that the underside surface (44) is operable to lay against an abdominal surface surrounding the umbilicus (3).~~

~~174. The umbilical splint (10) ofas claimed in claim 121, wherein the insertion end (22) is substantially planar.~~

~~185. The umbilical splint (10) ofas claimed in claim 121, ~~further~~ comprising a medicament applied to the insertion portion (20) of the umbilical splint (10).~~

~~196. The umbilical splint (10) ofas claimed in claim 121, ~~further~~ comprising a silicone gel sheet applied to the insertion portion (20) of the umbilical splint (10).~~

~~207.~~ The umbilical splint ~~(10)~~as claimed in claim ~~121~~, wherein a ratio of the bulbous circumference to the retaining circumference is between 1 .01 and 1.4.

~~218.~~ The umbilical splint ~~as claimed in~~ claim ~~121~~, wherein the bulbous circumference is substantially ovular in shape.

9. The umbilical splint (10) as claimed in claim 1, wherein the umbilical splint (10) is manufactured out of a rigid material.

10. The umbilical splint (10) as claimed in claim 1, wherein a bottom bulbous portion is formed of a material selected from the group consisting of hard plastic, glass, metal, medical ceramic, medical plastic.

~~22. A method of post-operative care comprising:~~

~~inserting an umbilical splint into an umbilicus after an abdominal operation, the umbilical splint comprising an insertion portion extending in a longitudinal direction and terminating at an insertion end;~~

~~retaining the umbilical splint within the umbilicus using a retaining section of the insertion portion to engage the umbilicus;~~

~~applying pressure to the umbilicus using a bulbous section of the insertion portion to shape the umbilicus after the abdominal operation; and~~

~~maintaining the umbilical splint within the umbilicus for a period of time until the umbilicus has healed from the abdominal operation.~~

~~23. The method of post-operative care as claimed in claim 22, wherein the umbilical splint is used to counteract scar contracture of the umbilicus by applying pressure to a scar.~~

ABSTRACT

UMBILICAL SPLINT AND METHOD OF USE

A use of an umbilical splint for shaping an umbilicus after an abdominal operation is described. The umbilical splint may comprise an insertion portion extending in
5 a longitudinal direction and terminating at an insertion end for insertion into the umbilicus. Furthermore, the insertion portion may comprise a bulbous section near the insertion end. The bulbous section may be operable to apply pressure to a tissue of the umbilicus after the abdominal operation. The insertion portion may have different cross-sectional shapes including circular and oval. Finally, the
10 insertion portion may be configured to engage the umbilicus such that the umbilical splint is retained within the umbilicus.

FIG. 1