Lyostypt®

Time to hemostasis

Biosurgicals

B BRAUN
SHARING EXPERTISE

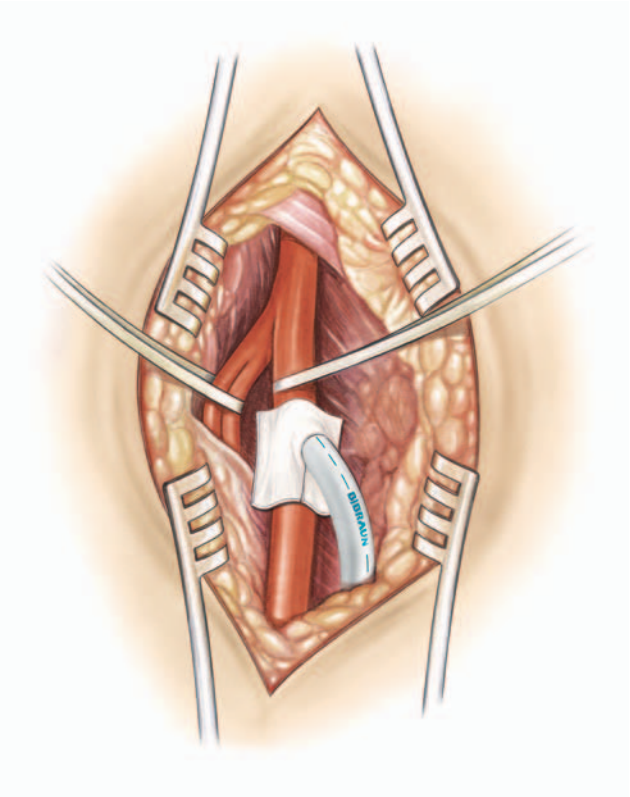
Lyostypt®

Time to hemostasis

Adaptable

Lyostypt® is used for topical hemostasis of capillary bleeding, oozing hemorrhages and as a supportive measure for other hemostasis techniques.

In hemodialysis, Lyostypt® is also used for local hemostasis at the puncture site.



What is needed

- Efficient hemostasis
- Can be combined with fibrin glue[1]
- Can be combined with antibiotics[2]
- Only small amount needed / cost efficient
- Absorbed within 3 weeks
- Excellent biocompatibility

[1] Uranüs S et al. *Laparoskopische Eingriffe an der Milz* Chir Gastroenterol. 20 (2004) 1-8.

[2] Wachol-Drewek Z et al. *Comparative investigation of drug delivery of collagen implants saturated in antibiotic solutions and a sponge containing Gentamicin*, Biomaterials. 17 (1996) 1733-8.

Lyostypt®

Collagen: Proven Efficacy

COBBANA Trial

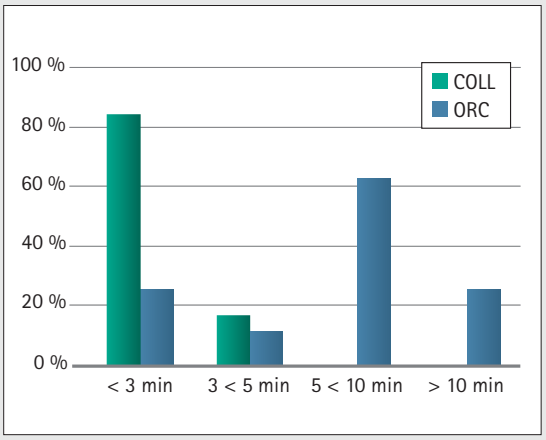
COBBANA: Control of bleeding in arterial bypass anastomosis[3]

- Prospective, randomized clinical trial
- Comparison of fibrillar collagen (Lyostypt®) versus oxidized regenerated cellulose (Surgicel®).[3]
- Hemostatic effect and handling properties were rated in suture hole bleeding of peripheral arterial bypass anastomosis using PTFE graft prosthesis.
- N = 64 anastomoses (32 Lyostypt®, 32 Surgicel®).

Faster hemostasis

Bleeding time of the anastomoses

- Fibrillar collagen showed significantly faster hemostasis *(124 ± 67 sec)* compared to oxidized regenerated cellulose *(416 ± 226 sec)* in suture hole bleedings of arterial bypass anastomosis.[4]



COLL: Collagen based device (Lyostypt®)
ORC: Oxidized regenerated cellulose (Surgicel®)

Fibrillar collagen stopped suture hole bleeding of the anastomoses in less than 3 minutes in over 80 % of cases. Oxidized cellulose needed more than 5 minutes to stop suture hole bleeding in most of the anastomoses performed.

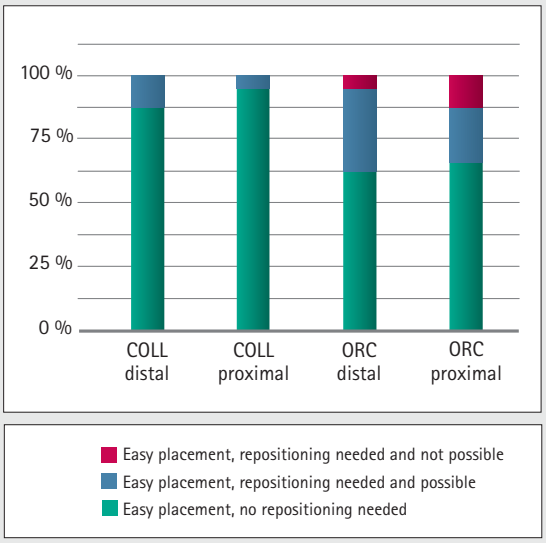
[3] Baumann P et al. *A randomized controlled, prospective trial to evaluate the haemostatic effect of Lyostypt versus Surgicel® in arterial bypass anastomosis: 'Cobbana' Trial.* Trials. 10 (2009) 91.

[4] Qerimi B, Baumann P, Hüsing J, Knaebel HP, Schumacher H. *Collagen hemostat significantly reduces time to hemostasis compared to cellulose.* COBBANA, a single-center randomized trial. Am J Surg. 2012; in print.

Better performance

Intraoperative efficacy rating

- Fibrillar collagen showed better adherence to the tissue and handling properties compared to oxidized regenerated cellulose in suture hole bleeding of arterial bypass anastomoses.[4]
- Less fibrillar collagen devices were needed to achieve hemostasis, demonstrating its major cost-effectiveness.[4]



COLL: Collagen based device (Lyostypt®)
ORC: Oxidized regenerated cellulose (Surgicel®)

Fibrillar collagen did not need to be repositioned in more than 80 % of the anastomoses performed. In cases where needed, collagen could be easily repositioned in all cases.[4]

Collagen advantages

Collagen is an excellent option due to its well-known advantages[5]:

- Fast induction of hemostasis, low tissue reaction and fast absorption.[6]
- An excellent hemostatic agent in microvascular surgery.[5]
- Faster hemostasis than oxidized cellulose.[4]
- Collagen is absorbed faster than oxidized cellulose.[5]
- Better adhesion to tissue and surgical handling than oxidized cellulose.[4]
- Lower amount of material needed to stop bleeding in comparison to oxidized cellulose.[4]

[5] Schonauer C et al. *The use of local agents: bone wax, gelatin, collagen, oxidized cellulose* Eur Spine J. 13 (2004) 89-96.

[6] Alpaslan C et al. *Tissue reaction to three subcutaneously implanted local hemostatic agents.* Br J Oral Maxillofac 35 (1977) 129-132.

Lyostypt®

Ordering Information

	Sizes	Art. No.	Contents
	3 cm x 5 cm	1069128	12 pieces
	5 cm x 8 cm	1069152	6 pieces
	5 cm x 8 cm	1069020	12 pieces
	10 cm x 12 cm	1069209	4 pieces
	10 cm x 12 cm	1069039	8 pieces
	5 cm x 30 cm	1069306	4 pieces

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Brochure No. B16002 0612/2.0/4