Hya Corp for print.pdf 1 11/25/15 10:34 AM

Perioperative Risk Score

score

Quality of existing adhesions
None 0 ☐ Filmy 2 ☐ Vascular 3 ☐ Dense 4 ☐

Severity of existing adhesions
None 0 ☐ Single adhesion 1 ☐ 2 to 3 adhesions 2 ☐
>3 adhesions 3 ☐ Adhesion(s) with bowel involvement 4 ☐

Bleeding
No 0 ☐ Yes (>500 ml) 4 ☐

Procedure duration
< 90 min 2 ☐ 90 to 2 hours 3 ☐ >2 hours 4 ☐

Procedure complexity or extent of surgery e.g. enterotomy, oncological surgery
Multiple quadrants e.g. adhesiolysis, ovarian carcinoma surgery
No 0 ☐ Yes 3 ☐

Excessive coagulation >2 cm^2
No 0 ☐ Yes 2 ☐

Type and site of surgery

Laparoscopy/Fallopian tube	1	☐
Open/Uterus	3	☐
Open/Fallopian tube	2	☐
Laparoscopy/Adhesiolysis, uterus	3	☐
Laparoscopy/All other procedures	2	☐
Open/Ovary	4	☐

Intra-abdominal placement of foreign bodies e.g. meshes
No 0 ☐ Yes 3 ☐

Use of electrical scalpel
No 0 ☐ Yes 2 ☐

Peritoneal closing
No 0 ☐ Yes 1 ☐

Total

Evaluation of Score

Preoperative Adhesion Risk	Score	Perioperative Adhesion Risk	Score
Low Risk	0 - 12	Low Risk	3 - 17
Medium Risk	13 - 24	Medium Risk	18 - 28
High Risk	25 - 36	High Risk	29 - 31

*Lundorff P, Brölmann H, Koninckx PR, et al. Predicting formation of adhesions after gynaecological surgery: development of a risk score. *Archives of Gynecology and Obstetrics*. 2015;292(4):931-938. doi:10.1007/s00404-015-3804-0.
**this table is an adjusted version of the minimum-maximum adhesion risk score and the Adhesion Risk Scores proposed to estimate risk of post-surgical adhesions in women undergoing gynaecological surgery

HYAcorp endo gel
Anti Adhesion Barrier Gel

Prevention
Is Better Than Cure

Composition:

1 ml **HYACORP ENDO GEL** contains:

Na-hyaluronate cross-linked	**20.0mg**
Na-hyaluronate	**2.0mg**
sodium chloride	**6.9mg**
Water for injection ad	**1.0ml**



References:
1- Weibel, M.A. and Majno, G. (1973) Peritoneal adhesions and their relation to abdominal surgery. A post-mortem study. American Journal of Surgery, 126, 345353-. http://dx.doi.org/10.1016/S00020-80123(73)9610-.
2- Menzies, D. and Ellis, H. (1990) Intestinal obstruction from adhesions-How big is the problem? Annals of the Royal College of Surgeons of England, 72, 6063-.
3- Liselotte Mettler 2014 , Effect of cross linked sodium hyaluronate in adhesion reduction within the gynecologic surgical window. Department of Obstetrics and Gynecology, University Hospitals of Schleswig Holstein, Campus Kiel, Kiel, Germany
4- Beck, D.E., Opelka, F.G. and Bailey, R. (1999) Incidence of small bowel obstruction and adhesiolysis after open colorectal and general surgery. Diseases of the Colon & Rectum, 42, 241248-. http://dx.doi.org/10.1007/BF02237135
5- Hershlag, A., Diamond, M.P. and Decherney, A.H. (1991) Adhesiolysis. Clinical Obstetrics and Gynecology, 34, 395402-. http://dx.doi.org/10.109700023-199106000-00003081/
6- Adhesion prevention strategies in laparoscopic surgery, George Pados et.al. 1st Dept. of OB-GYN, School of Medicine, Aristotle University of Thessaloniki, «Papageorgiou» General Hospital, N. Efkarpia, Greece

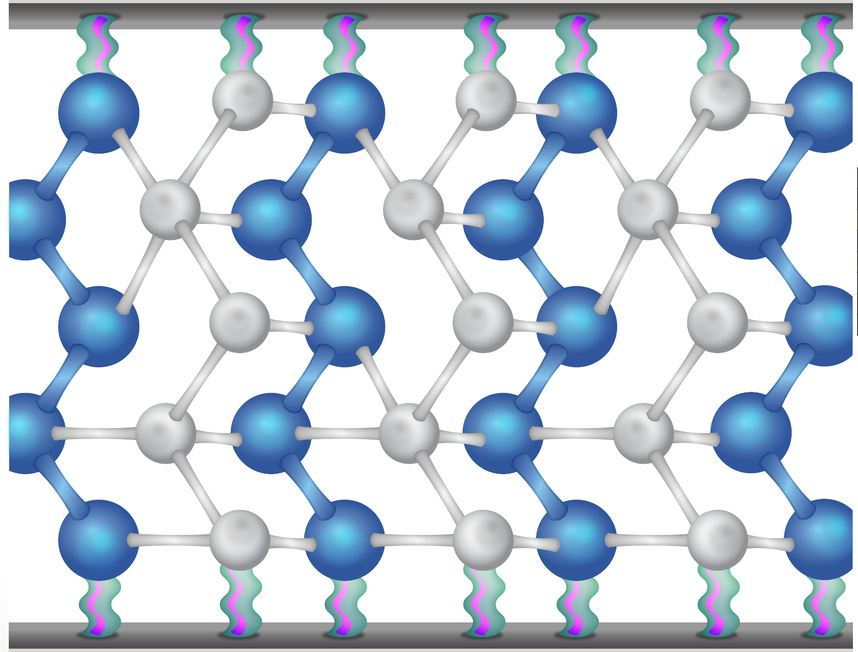
Elaf Medical Supplies
ايلاف للتجهيزات الطبية
MENA/EU Headquarters:
P.O.Box 1348 Amman 11941 Jordan
Tel: +962 (06) 5549896
Fax: +962 (06) 5549897
www.elaf-me.com

Bio SCIENCE
BioScience GmbH
Walsmühler Straße 18
19073 Dümmer - Germany
Fon: +49 (0) 2602 / 83 868-0
Fax: +49 (0) 2602 / 83 868-20
info@bio-science.org
www.bio-science.org

HYAcorp endo gel

Cross linked Sodium hyaluronate

Anti Adhesion Barrier Gel



Prevention
Is Better Than Cure

Hya Corp for print.pdf 2 11/25/15 10:34 AM

HYAcorp endo gel

Cross linked Sodium hyaluronate

Prevention
Is Better Than Cure

"The next generation, site specific hyaluronic acid based Anti-adhesion barrier gel, opens new challenges in adhesion prevention"[3]

Dr. Liselotte Mettler

HYACORP ENDO GEL is a prefilled cross linked, sterile, transparent, viscous Hyaluronic acid gel, that prevents postoperative adhesions in gynecology and abdominal surgeries:

- Laparoscopic Total Hysterectomy (LTH)
- Laparoscopic Subtotal Hysterectomy (LSH)
- Polypectomy
- Myomectomy
- Endometriosis surgeries
- Caesarean surgery

Postoperative adhesion is a consequence of abnormal wound healing of adjacent tissue surfaces that can cause:[4,5,6]

- Intestinal obstruction.
- Secondary female infertility.
- chronic pelvic or abdominal pain.
- Re-operative surgery.
- Complications in future surgical procedures.

HYACORP ENDO GEL is cross-linked and stabilized hyaluronic acid. This ensures that the body breaks down **HYACORP ENDO GEL** slowly, resulting in a long-lasting effect.

STEP 1
Hyaluronic acid is synthesized from non-animal sources.

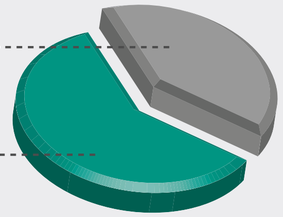
STEP 2
The first cross-linking of the hyaluronic acid solution is completed.

STEP 3
Washing and stabilization of the hyaluronic acid gel takes place.

STEP 4
The second cross-linking is completed, with the addition of hyaluronic acid coil-linked solution. This is followed by terminal purification.

The incidence of abdominal adhesions ranges from 67% to 93% in patients following general abdominal surgery, and 60% to 90% after gynaecological surgery. [6]

Adhesion Incidence



40% Patients without Adhesion

60% Patients with Adhesion

*Retrospective review of 462 patients undergoing laparoscopic surgery at the department of obstetrics and gynecology, university hospitals of Schleswig Holstein, Keil-Germany. 276 patients out of 462 had pelvic or abdominal adhesions. [3]

HYACORP ENDO GEL
significantly reduces the **incidence** of adhesion in gynecological procedures.[3]

HYACORP ENDO GEL
significantly reduces the **severity** of adhesion in gynecological procedures.[3]

Modified Hyaluronic Acid (cross linked) in the form of a resorbable gel has been reported to significantly reduce the incidence and severity of adhesions.[3]

Advantages of **HYACORP ENDO GEL**

- ✓Bio absorbable and safe.
- ✓Easy to use, prefilled syringe.
- ✓Site specific.
- ✓Used in Laparoscopy and Laparotomy surgeries.
- ✓Cost Effective.

Adhesion Risk Score*

The Preoperative Adhesion Risk Score may be calculated to evaluate the individual adhesion risk level specific to each woman prior to any gynecological operation.

Advantages of using Adhesion Risk Score:

- Help the surgeon to adapt the surgical technique as necessary
- Help decide whether the woman should receive an adhesion–reduction agent
- Inform patient of the potential risks of adhesions before their surgery

Preoperative Risk Score**

	score
Previous abdominal/Pelvic surgery None 0 ☐ Once 3 ☐ More than once 4 ☐	
History of Post-surgical adhesions No 0 ☐ Yes 4 ☐	
Concomitant abdominal or gynaecological inflammation and/or infection No 0 ☐ Yes 4 ☐	
Endometriosis Minimal 1 ☐ Mild 2 ☐ Moderate 3 ☐ Severe 4 ☐	
Cancer Gynaecologic cancer 2 ☐ Peritoneal carcinomatosis 2 ☐ Local non-gynaecological cancer 3 ☐ Metastatic cancer of extrapelvic origin 2 ☐	
Radiation therapy in intra-abdominal cancer Local 4 ☐ Distant sites 1 ☐	
Keloid scarring No 0 ☐ Yes 3 ☐	
Intraperitoneal bleeding No 0 ☐ Yes 2 ☐ (Unexpected 2 g % drop of Hb)	
Postoperative complications e.g. fistulas, abscesses No 0 ☐ Yes 4 ☐	
Postoperative Infection (≥ 38 C for ≥ 2 days) No 0 ☐ Yes 4 ☐	
	Total

*Lundorff P, Brölmann H, Koninckx PR, et al. Predicting formation of adhesions after gynaecological surgery: development of a risk score. *Archives of Gynecology and Obstetrics*. 2015;292(4):931-938. doi:10.1007/s00404-015-3804-0.

**this table is an adjusted version of the minimum-maximum adhesion risk score and the Adhesion Risk Scores proposed to estimate risk of post-surgical adhesions in women undergoing gynaecological surgery