

Publications on Tutoplast[®] Fascia lata

(as of April 2007. Publications mentioning procedures performed by different disciplines are listed in all these)

Neurosurgery

FL-N1 EICHNER H and AA BEHBEHANI

Clinical experiences with dehydrated solvent dried human Fascia lata in Oto-Rhino-Laryngology

Transactions of the VIII International Congress of Plastic Surgery, Montreal, Canada (1983)
Report on 174 patients treated with Tutoplast Fascia lata including 83 duraplasties after fronto-basal fractures and 5 after latero-basal fractures.

FL-N2 BEHBEHANI AA and H EICHNER

Experiences with solvent-dehydrated Fascia lata in surgical interventions in otorhinolaryngology (Erfahrungen mit lösungsmittelgetrockneter Fascia lata bei operativen Eingriffen im Hals-Nasen-Ohrenbereich)

Laryng. Rhinol. Otol. 62 (12); 1983

Continuation of the above paper now on 225 patients, including 103 duraplasties after fronto-basal fractures and 5 after latero-basal fractures. Grafts healed as good as autografts. (Article in German with English abstract)

FL-N3 BRUNNER FX

Implant materials-What has proven where and when? (Implantatmaterialien-was hat sich wo und wann bewährt?)

Oto-Rhino Laryngology, Suppl I, 1993

Overview over implant materials including Tutoplast Fascia lata. It mentions good tolerability and suitability for duraplasties in the frontal sinus and other skull base cavities.

(Article in German, English translation available)

FL-N4 GJURIC M and M WINTER

Rhinoloquorrhoea and Otoliquorrhoea (Rhinoliquorrhö und Otoliquorrhö)

HNO, 46, 1998

Overview over ethiology, diagnostic and therapy. For closure of liquor fistulas Tutoplast Dura or Fascia lata is recommended besides autografts (Article in German, no English translation available)

FL-N5 SCHICK B et al.

Duraplasties in the region of the sphenoid sinus (Duraplastiken im Bereich der Keilbeinhöhle)

Laryngo-Rhino-Otol, 75, 1996

18 Patients with duraplasty in the sphenoid sinus were followed after average 5 years. 10 had Tutoplast connective tissue (Dura or Fascia lata). 2 recurrences could be successfully closed.

(Article in German with English abstract)

FL-N6 SCHICK B et al.

Long-term results of frontobasal duraplasties (Langzeitergebnisse frontobasaler Duraplastiken)

HNO, 45, 1997

161 patients were followed after an average of 6 years. 42 had Tutoplast Fascia lata. Duraplasty was successful in 96%. (Article in German, no English translation available)

FL-N7 SCHICK B et al.

Long-term study of endonasal duraplasty and review of the literature

Ann Otol Rhinol Laryngol, 100; 2001

Retrospective study on 126 patients with 136 endonasal duraplasties. In 122 cases Tutoplast membranes (Dura and Fascia lata) were used. Primary closure of the defect was achieved in 129 cases.

FL-N8 WEBER R et al.

Management of dural lesions occurring during endonasal sinus surgery.

Arch Otolaryngol Head Neck Surg, 122; 1996

Retrospective study on 47 patients. In 33 Tutoplast Dura and in 14 Tutoplast Fascia lata was used. 42 patients could be followed for 5 years. No meningitis or recurrence occurred.

FL-N9 WEBER R et al.

Rhinobasal duraplasty - indication, technique, results (Die rhinobasale Duraplastik-Indikation, Technik, Ergebnisse.)

Abstract. Klin Monatsbl Augenheilkd, Suppl. 2, 1996

161 patients with Tutoplast duraplasty were followed for an average of 5 years. Only 4 recurrences occurred. The authors recommend Tutoplast Dura or Fascia lata for duraplasty.

FL-N10 WEBER R et al.

Osteoplastic frontal sinus surgery with fat obliteration. Technique and long-term results using magnetic resonance imaging in 82 operations.

Laryngoscope, 110(6), 2000

Overview. The importance of closure of the nasofrontal duct is stressed several times. Tutoplast Fascia lata is recommended for this.

FL-N11 WEBER R et al.

Modern concepts of frontal sinus surgery

The Laryngoscope, 111(1); 2001

Overview on indications and techniques. Tutoplast Fascia lata is recommended for duraplasties and closure of the nasofrontal duct.

FL-N12 WEBER et al.

First experiences with endonasal duraplasty without routine administration of antibiotics. (Erste Erfahrungen mit der endonasalen Duraplastik ohne die routinemäßige Gabe von Antibiotika)

Laryngo-Rhino-otol, 82, 2003

In 7 patients an endonasal duraplasty was performed with Tutoplast Fascia lata without antibiotics administration. All plasties were tight. 6 patients were without complications. In one patient with a large dural defect fever developed due to heavy bacterial colonisation of the nasal tamponade.

FL-N13 WUSTROW TPU et al.

Reconstruction of defects in the anterior skull base

In: SAMII M (Ed), Skull Base Surgery, Anatomy, Diagnosis and Treatment, Karger Publications, 1994

For traumatic bone defects without a dural defect one layer of Tutoplast Fascia lata is recommended. In the presence of a dural defect two layers are recommended. Tutoplast is wrongly named lyophilised allogenic fascia lata.

Maxillofacial Surgery

FL-K1 AKÖZ T et al.

Influence of utility of Fascia lata homograft on the palatal fistula in cleft palate repair

Eur J Plast Surg, 18; 1995

Report on 47 patients with cleft palate. In 36 cases Tutoplast Fascia lata was used. Thereby a significant reduction of fistula formation could be achieved compared to the standard technique.

FL-K2 BEHBEHANI AA and H EICHNER

Experiences with solvent-dried fascia lata in surgical interventions in otorhinolaryngology (Erfahrungen mit lösungsmittelgetrockneter Fascia lata bei operativen Eingriffen im Hals-Nasen-Ohrenbereich)

Laryngol Rhinol Otol, 62(12); 1983

Report on 225 patients treated with Tutoplast Fascia lata among them 21 with orbital floor blow-out fractures. Healing was as good as with autologous fascia. (Article in German with English abstract)

FL-K3 CELIKÖZ B et al.

Reconstruction of the orbital floor with lyophilized tensor fascia lata

J Oral Maxillofac Surg, 55; 1997

The orbital floor was reconstructed with Tutoplast Fascia lata in 12 patients. Within the follow-up period of 1 to 2 years no complications or recurrences occurred.

FL-K4 DAWOOD H et al.

The clinical evaluation of the application of solvent dehydrated (Tutoplast) human fascia lata in oral surgery.

Abstract. Official journal of the Egyptian Dental Association, 46(4.2), 2000

Tutoplast Fascia lata was used in 16 patients. It showed good hemostasis and was well tolerated. The authors recommend it for repair of oral mucosal defects, for GTR and closure of oral-antral fistulas.

FL-K5 SEZER B et al.

Comparison of autogenous mucosal grafts and collagen-based, solvent-preserved allografts for vestibuloplasty

Quintessence International, 35(3); 2004

In 6 patients each a vestibuloplasty was performed using autologous palatal mucosa, Tutoplast Dura and Tutoplast Fascia lata. After 6 months no significant differences were found between the groups.

FL-K6 STIERNBERG CM

Use of solvent-preserved homologous Fascia lata for prophylactic carotid artery protection

Manuscript from a presentation at the International Conference on Head and Neck Cancer, Boston, MA, 1988

In 16 patients Tutoplast Fascia lata was used instead of autologous skin for carotid artery protection after radical neck dissection. In 2 patients a deep wound infection developed with exposure of the fascia but the carotid artery remained unaffected.

Ophthalmology

FL-A1 ABE S et al.

Clinical experiences with solvent-dried Fascia lata in Plastic surgery

Report on 25 patients successfully treated with Tutoplast fascia lata including 10 with upper lid suspension and 4 with lower lid suspension.

FL-A2 ARSLAN E et al.

Enhanced frontalis sling with double fixed, solvent-dehydrated cadaveric fascia lata allograft in the management of eye ptosis

The Journal of Craniofacial Surgery, 15(6); 2004

Report on 5 successful upper lid suspensions in 3 patients using Tutoplast Fascia lata with a new technique.

FL-A3 BEHBEHANI AA and E EICHNER

Experiences with solvent dehydrated Fascia lata in surgical interventions in otorhinolaryngology (Erfahrungen mit lösungsmittelgetrockneter Fascia lata bei operativen Eingriffen im Hals-Nasen-Ohrenbereich)

Laryng Rhinol Otol, 62; 1983

Report on 225 patients including 21 with orbital floor reconstruction. Tutoplast Fascia lata healed like a fascia lata autograft. (Article in German with English abstract)

FL-A4 CELIKÖZ B et al.

Reconstruction of the orbital floor with lyophilized tensor fascia lata.

J Oral Maxillofac Surg, 55; 1995

Orbital floor reconstruction was performed in 12 patients using Tutoplast Fascia lata. No complications or recurrences occurred during follow-up of 1-2 years

FL-A5 DETORAKIS ET et al.

Processed Fascia lata as an alternative implant material in evisceration

Ophthal Plast Reconstr Surg, 21(2) ; 2005

In 8 patients the eviscerated scleral shell was filled with Tutoplast Fascia lata. CT and MRI at 12 months showed vascularity of the fascia.

FL-A6 ESSER J and A ECKSTEIN

Tendon elongation: a new surgical technique for convergent squint after three wall orbital decompression in thyroid associated ophthalmopathy

Exp Clin Endocrinol Diabetes, 114; 2006

In 18 patients Tutoplast Fascia lata was used for elongation of the rectus medialis tendon with very good results. The authors conclude, that interposition of Tutoplast is a safe method to correct large convergent squint angles after orbital decompression.

FL-A7 Gürdal C et al.

Autogenous versus allograft Fascia lata in frontalis sling surgery – long term results

Euro J Ophthalmol, 13(2); 2003

Results of 43 patients with Tutoplast Fascia lata slings were compared to autografts over a period of 7.5 years. No differences were found.

FL-A8 McCORD CD et al.

The correction of lower lid malposition following lower lid blepharoplasty

Plast Reconstr Surg, 92(6); 1993

20 patients had lower lid corrections with Tutoplast Fascia lata and were followed for 4 years. All corrections remained stable.

FL-A9 TANJI T et al.

Fascia lata patch graft in glaucoma tube surgery

Ophthalmology, 103(8); 1996

22 glaucoma shunts were covered with Tutoplast Fascia lata. Follow-up was 4-25 months. All patches healed without reactions and no shunt exposure occurred.

FL-A 10 SEIDER N et al.

One medial triangular Tutoplast sling as a frontalis suspension for adult myogenic blepharoptosis

Acta Ophthalmologica Scandinavia, 84(2), 2006

Results of a new technique with tutoplast Fascia lata for upper eye lid suspension are presented. success was rated using three criteria. All 3 criteria were fulfilled in 91% and all fulfilled 2 criteria.

FL-A11 SILGUERO D et al.

Kohn Romano Syndrome

Arch Soc Canar Oftal. 1999

Case report on the successful use of Tutoplast Fascia lata in a 16-year old patient. (Article in Spanish, no English translation available)

FL-A12 Gutierrez-Diaz E et al.

Long-term persistence of fascia lata patch graft in glaucoma drainage device surgery

Eur J Ophthalmol, 14(3); 2005

Case report. A glaucoma shunt covered with Tutoplast Fascia lata had to be removed 2 years after implantation. Histology revealed fibrous encapsulation of the fascia that was still acellular. The authors believe that in this case this is of advantage.

Oto-Rhino-Laryngology

FL-H 1 EICHNER H and BEHBEHANI AA

Clinical experiences with solvent dried fascia lata in Oto Rhino Laryngology

In: Williams B (Ed.) Transactions of the VIII International Congress of Plastic and Reconstructive Surgery, Montreal, Canada, 1983

Report on 174 patients treated with Tutoplast Fascia lata. 83 frontobasal fractures with rhinoliquorrhea, 61 tympanoplasties with lining of the mastoid, 16 orbital floor fractures, 9 nasal septum perforations, 5 laterobasal fractures. All grafts healed like autografts.

FL-H2 BEHBEHANI AA and EICHNER H

Experiences with solvent-dried Fascia lata in surgical interventions in Oto-Rhino-Laryngology (Erfahrungen mit lösungsmittelgetrockneter Fascia lata bei operativen Eingriffen im Hals-Nasen Ohrenbereich.)

Laryng Rhinol Otol, 63, 1983

Continuation of the aforementioned paper. Now 225 patients. 103 frontobasal fractures, 83 tympanoplasties with mastoid lining, 21 orbital fractures, 11 septum perforations, 5 laterobasal fractures and 2 facial suspensions. (Article in German, English translation available)

FL-H3 BRUNNER FX

Implant materials – what has proven where and when? (Implantatmaterialien-was hat sich wo und wann bewährt)

Laryngology Suppl I, 1993

Overview over various implant materials in head and neck surgery including Tutoplast Fascia lata. Its suitability especially for duraplasties at the skull base is outlined. (Article in German, English translation available)

FL-H4 CELIKÖZ B et al.

Reconstruction of the orbital floor with lyophilized tensor fascia lata.

J Oral Maxillofac Surg, 55; 1995

Orbital floor reconstruction was performed in 12 patients using Tutoplast Fascia lata. No complications or recurrences occurred during follow-up of 1-2 years.

FL-H5 MICHEL O

Endonasal Surgery of space-occupying lesions of the frontobasis and the adjacent orbits.

Endonasale Operationen von Raumforderungen der Frontobasis und angrenzenden Orbita.)

In: Steudel W (Ed.) Transfacial access to the skull base (Transfaciale Zugänge zur Schädelbasis), Einhorn Presse Verlag, 1995

Overview. Tutoplast Fascia lata is recommended for closure of liquor leaks. (article in German, no English translation available)

FL-H6 MICHEL O et al.

Autologous and allogenic Fascia lata in rehabilitation of the paralysed face

In: Yanagihara and Murakami (Ed), New Horizons in Facial Nerve Research and Facial Expression, Kugler Publications, 1998

In 10 patients each either Tutoplast Fascia lata or autologous fascia lata was used for facial suspension. Results were identical.

FL-H7 MICHEL O

Transnasal surgery of the orbita. Overview over actual indications and techniques.

(Transnasale Chirurgie der Orbita. Übersicht aktueller Indikationen und Techniken.)

HNO, 48, 2000

Overview. For the reconstruction either Tutoplast Fascia lata, Fascia temporalis or Tutopatch is recommended. PDS foil is declined because of poor handling due to its rigidity and poor epithelisation. (Article in German, no English translation available)

FL-H8 SCHICK et al.

Duraplasties in the sphenoid sinus (Duraplastiken im Bereich der Keilbeinhöhle)

Laryngo-Rhino-Otol, 75, 1996

18 patients had duraplasty in the sphenoid sinus, 10 of them had Tutoplast connective tissue (Dura or Fascia lata). Follow-up was 5 years on average. 2 recurrent fistulas could be successfully revised. (Article in German, no English translation available)

FL-H9 SCHICK B et al.

Long-term results of frontobasal duraplasties (Langzeitergebnisse frontobasaler Duraplastiken)

HNO, 1997

161 patients with frontobasal duraplasty, 42 of them with Tutoplast fascia lata were examined after an average of 6 years. Duraplasty was successful in 96%. (Article in German, no English translation available)

FL-H10 SCHICK B et al.

Long-term study of endonasal duraplasty and review of the literature

Ann Otol Rhinol Laryngol, 100; 2001

Retrospective study on 126 patients with 136 endonasal duraplasties. In 122 cases Tutoplast membranes (Dura and Fascia lata) were used. Primary closure of the defect was achieved in 129 cases.

FL-H11 STIERNBERG CM

Use of solvent-preserved homologous Fascia lata for prophylactic carotid artery protection

Manuscript from a presentation at the International Conference on Head and Neck Cancer, Boston, MA, 1988

In 16 patients Tutoplast Fascia lata was used instead of autologous skin for carotid artery protection after radical neck dissection. In 2 patients a deep wound infection developed with exposure of the fascia but the carotid artery remained unaffected.

FL-H12 WEBER R et al.

Management of dural lesions occurring during endonasal sinus surgery.

Arch Otolaryngol Head Neck Surg, 122; 1996

Retrospective study with 47 patients. In 33 Tutoplast Dura and in 14 Tutoplast Fascia lata was used. 42 patients could be followed for 5 years. No meningitis or recurrence occurred.

FL-H13 WEBER R et al.

Rhinobasal duraplasty-indication, technique, results (Die rhinobasale Duraplastik-Indikation, Technik, Ergebnisse)

Abstract. Klin Monatsbl Augenheilkd, Suppl. 2, 1996

Follow-up of 161 patients after average 5 years. Only 4 recurrences were found. The authors recommend Tutoplast membranes (Dura or Fascia lata) because of these good results. (Article in German, no English translation available)

FL-H14 WEBER R et al.

Osteoplastic frontal sinus surgery with fat obliteration: Technique and long-term results using magnetic resonance imaging in 82 operations.

Laryngoscope, 110, June; 2000

Overview. For sealing of the frontonasal duct Tutoplast Fascia lata is recommended besides various autografts.

FL-H15 WEBER R et al.

Modern concepts of frontal sinus surgery

The Laryngoscope, 111(1); 2001

Overview on indications and techniques. Tutoplast Fascia lata is recommended for duraplasties and closure of the nasofrontal duct.

FL-H16 WEBER R et al.

First experiences with endonasal duraplasty without routine administration of antibiotics. (Erste Erfahrungen mit der endonasalen Duraplastik ohne die routinemäßige Gabe von Antibiotika.)

Laryngo-Rhino-Otol, 82, 2003

7 patients had endonasal duraplasty with Tutoplast Fascia lata without routine administration of antibiotics. All plasties were tight. 6 patients were without complications. One patient developed intermittent fever due to heavy bacterial colonization of the nasal tamponade. (Article in German with English abstract)

FL-H17 WUSTROW TPU et al.

Reconstruction of defects in the anterior skull base.

In: Samii M (ED.) skull Base Surgery, Anatomy, Diagnosis and Treatment, Karger, 1994

For traumatic bone defects without a dural defect one layer Tutoplast Fascia lata (erroneously named lyophilized allogenic Fascia lata) is recommended. If a dural defect exists two layers are recommended.

FL-H 18 GJURIC M and M WINTER

Rhinoloquorrhoea and Otoliquorrhoea (Rhinoliquorrhö und Otoliquorrhö)

HNO, 46, 1998

Overview on ethiology, diagnostic and therapy. For closure of liquor fistulas Tutoplast Dura or Fascia lata is recommended besides autografts (Article in German, no English translation available)

Plastic Surgery

FL-P 1 ABE S et al.

Jap J Plast Reconstr Surg, 11; 1991

Clinical experiences with solvent-dried Fascia lata in Plastic surgery

Report on 25 patients treated with Tutoplast fascia lata. 10 with upper lid suspensions, 4 lower lid suspensions, 8 facial suspensions, 2 incisional hernias. All grafts healed uneventful and produced lasting results. (article in Japanese, English translation available)

FL-P 2 AKÖZ T et al.

Influence of utility of Fascia lata homograft on the palatal fistula in cleft palate repair

Eur J Plast Surg, 18; 1995

Report on 47 patients with cleft palate. In 36 cases Tutoplast Fascia lata was used. Thereby a significant reduction of fistula formation could be achieved compared to the standard technique.

FL-P 3 ARSLAN E et al.

Enhanced frontalis sling with double fixed, solvent-dehydrated cadaveric fascia lata allograft in the management of eye ptosis

The Journal of Craniofacial Surgery, 15(6); 2004

Report on 5 upper lid suspensions in 3 patients using Tutoplast Fascia lata. Additional to the standard technique the strips were fixed to the frontalis muscle.

FL-P4 BEHBEHANI AA and EICHNER E

Experiences with solvent dehydrated Fascia lata in surgical interventions in Oto-Rhino-Laryngology (Erfahrungen mit lösungsmittelgetrockneter Fascia lata bei operativen Eingriffen im Hals-Nasen-Ohrenbereich)

Laryng Rhinol Otol, 62, 1983

Report on 225 patients treated with Tutoplast Fascia lata for various reasons. 2 had facial suspension. All grafts healed like autografts. (Article in German, English translation available)

FL-P 5 GÜRDAL C et al.

Autogenous versus allograft Fascia lata in frontal sling surgery – long term results

Euro J Ophthalmol, 13(2); 2003

Results of 43 patients with Tutoplast Fascia lata slings were compared to autografts over a period of 7.5 years. No differences were found.

FL-P 6 McCORD CD et al.

The correction of lower lid malposition following lower lid blepharoplasty

Plast Reconstr Surg, 92(6); 1993

20 patients had lower lid corrections with Tutoplast Fascia lata and were followed for 4 years. All corrections remained stable.

FL-P 7 MICHEL O et al.

Autologous and allogenic Fascia lata in rehabilitation of the paralysed face

In: Yanagihara and Murakami(Ed), New Horizons in Facial Nerve Research and Facial Expression, Kugler Publications, 1998

In 10 patients each either Tutoplast Fascia lata or autologous fascia lata was used for facial suspension. Results were identical.

FL-P 8 SEIDER N et al.

One medial triangular Tutoplast sling as a frontalis suspension for adult myogenic blepharoptosis

Acta Ophthalmologica Scandinavia, 84, 2006

Retrospective study on 24 patients treated with Tutoplast Fascia in a new technique. Success was measured with 3 criteria, lid heights, lid symmetry and lid contour. After median 9 months all patients fulfilled at least 2 criterias and 91% all.

FL-P 9 SILGUERO D et al.

Kohn-Romano-Syndrome

Arch Soc Canar Oftal, 1999

Case report on the successful use of Tutoplast Fascia lata in a 16 years old patient.(Article in Spanish)

General Surgery

FL-GS 1 ABE S et al.

Clinical experiences with solvent-dried Fascia lata in Plastic surgery

Report on 25 patients treated with Tutoplast fascia lata. 10 with upper lid suspensions, 4 lower lid suspensions, 8 facial suspensions, 2 incisional hernias. All grafts healed uneventful and produced lasting results.

FL-GS 2 ALESHENKO IE et al.

Use of Tutoplast processed bioimplants in repair of complicated defects of abdominal wall in newborn infants.

Abstract. 11th International Conference on Tissue Banking and EATB Annual Meeting, Bratislava, Slovakia, 2002

Report on the successful closure of large congenital abdominal defects in 14 children. 9 received Tutoplast Pericardium and 4 Tutoplast Fascia lata.

Urology/Gynecology

FL-U 1 BEGLEY J et al.

The use of graft materials in anterior compartment pelvic reconstruction

Current Urology Reports, 5; 2004

Literature review on techniques and results in cystocele repair with special emphasis on Tutoplast Fascia lata with the CaPS technique

FL-U2 BEGLEY JS et al..

Incidence and management of abdominal sacrocolpopexy mesh erosions

Am J Obstet Gynecol, 192; 2005

Retrospective study on 92 patients who were treated with various materials, 13 of them with Tutoplast Fascia lata. With Goretex 9% and with silicone coated meshes 19% erosions occurred but none with tutoplast and polypropylene mesh.

FL-U3 BETTIN S et al.

Charite-specific urinary stress incontinence procedures: 3. fascial colposuspension

Gynäkologische Praxis, 22; 1998

Detailed description of the technique using autogenous abdominal fascia. In cases with previous laparotomies or poor fascia quality Tutoplast Fascia lata is recommended. (Article in German, no English translation available)

FL-U 4 CAREY J and G LEACH

Transvaginal surgery in the octogenarian using cadaveric fascia for pelvic prolaps and stress incontinence: minimal 1-year results compared to younger patients.

Urology, 63(3); 2004

From a series of 455 patients treated with Tutoplast Fascia lata the results in patients 80 years and older were compared to those in younger patients. No differences were found.

FL-U 5 CHON J et al.

Results of the transvaginal cadaveric prolaps repair with sling (CAPS).

Abstract. Int. Continence Society, Annual Congress, Heidelberg, Germany, 2002

www.icsoffice.org

Results from 108 patients with a minimum follow-up of 12 months treated with Tutoplast Fascia lata are presented. 54% were cured and another 21% were improved >80%.

FL-U 6 CHON J et al.

Results of the cadaveric transvaginal sling (CATS) for the treatment of stress urinary incontinence.

Abstract. Int. Continence Society, Annual Meeting, Heidelberg, Germany, 2002

www.icsoffice.org

Results of 251 patients treated with Tutoplast Fascia lata with a minimum follow-up of 6 months are presented. 66 were cured, 68 improved >80% and a total of 168 improved >50%.

FL-U 7 CHON J et al.

Cadaveric fascial transvaginal sling (CATS): five-year prospective follow-up.

Abstract. Int. Continence Society. Annual Meeting. Florence, Italy 2003

www.icsoffice.org

Continuation of the G 4 study. Now with 445 patients and up to 5 years follow-up. Results remained stable.

FL-U 8 CULLIGAN P et al.

A double-blind, randomized controlled trial comparing solvent-dehydrated cadaveric fascia lata and polypropylene mesh for sacral colpopexy.

Obstetrics & Gynecology, 106(1); 2005

One year results of 100 patients with sacral colpopexy with either Tutoplast fascia lata(46) or polypropylene mesh(54) were compared. While the mesh showed better objective results Tutoplast was superior in subjective ratings.

FL-U 9 ELLIOT DS et al.

Is fascia lata allograft trustworthy for pubovaginal sling repair?

Urology, 56(5); 2000

Alarmed from an article reporting high failure rates with allogenic fascia lata, the authors have reviewed their own 26 patients who had received Tutoplast Fascia lata after 12-20 months. No indications for early failure were found. 20 patients were cured and another 4 needed only one pad per day.

FL-U 10 Fischer W, R TUNN

Use of fascia lata in urinary incontinence surgery (Fascia-lata-Verwendung bei Harninkontinenzoperationen)

Abstract. Deutsche Gesellschaft für Gynecology und Geburtshilfe, 50. Kongress, München, 1994

Abstract on a video presentation showing the three different techniques of the authors. They conclude: Connective tissue reconstruction with dehydrated Fascia lata (Tutoplast) has especially proven.

FL-U 11 FISCHER W and R TUNN

How to save and support autologous tissue in vaginal operations for urinary incontinence?

Urogynaecologia International J, 8; 1994

Results with Tutoplast Fascia lata bridgeplasty and transposition of parts of the pubococcygeal musculature are compared. Cure rate was 60% for both procedures. With Tutoplast Fascia lata the improvement rate increased from 27% to 35% and recurrence rate dropped from 13% to 5%.

FL-U 12 FITZGERALD MP et al.

The antigenicity of fascia lata allografts

BJU International, 86; 2000

Freeze-dried fascia lata, Tutoplast Fascia lata and Repliform were HLA typed with PCR before and one year after implantation. In Tutoplast and freeze-dried the donor DNA could be identified but with a much lower intensity in Tutoplast before implantation but not one year after. Analysis of Repliform failed, obviously because of residual chemicals from processing that interfered with the test.

FL-U 13 FREDERICK RW and GE LEACH

Cadaveric prolaps repair with sling: intermediate outcomes with 6 months to 5 years follow-up.

The Journal of Urology, 173(4); 2005

Results of 251 patients out of 295 treated with Tutoplast Fascia lata with a follow-up of minimum 6 months are presented. 207 patients were significantly improved and 141 thereof cured. No late recurrence occurred.

FL-U 14 GALLENTINE ML and RD CESPEDES

Review of cadaveric allografts in urology

Urology, 59; 2002

Review of the various processing techniques for allografts and review of the clinical literature. The authors conclude that most published reports continue to support allograft use, because it decreases operating time, expense, and morbidity, allowing patients to recover faster while producing equivalent continence rates.

FL-U 15 GANDHI S et al.

A prospective randomized trial using solvent dehydrated fascia lata for the prevention of recurrent anterior vaginal wall prolapse

Am J Obstet Gynecol, 192; 2005

154 women were randomly assigned to either receive standard surgery(78) or standard plus a 2x4cm Tutoplast fascia lata patch sutured under the anterior repair. Recurrence rate in the patch group was slightly but not significantly lower. Patients with concomitant Coopers ligament sling had significantly less recurrence.

FL-U 16 GEOMINI P et al.

Vaginal vault suspension by abdominal sacral colpopexy for prolapse: follow up study of 40 patients

Obstetrics & Gynecology, 94; 2001

Follow-up study after mean 38 months (9.3-80) of 40 patients. 12 had Tutoplast Fascia lata and 28 GoreTex. Two GoreTex grafts became infected and had to be removed. the authors conclude that collagen tissue as graft material is promising. An advantage of the organic material is the easy tissue handling. As the laparoscopic approach in abdominal prolaps surgery is winning ground, these specific properties could be an important issue.

FL-U 17 GHONIEM GM and W BRYAN

Male perineal sling

Techniques in Urology, 7(3); 2001

In 10 patients with urinary incontinence after prostatectomy a suburethral sling of Tutoplast Fascia lata was implanted. 7 were cured and 1 significantly improved. In 2 patients the bone anchor used for fixation had loosened, leading to a sudden recurrence.

FL-U 18 GRIFFIS K, HALE DS

Grafts in pelvic reconstructive surgery

Clinical Obstetrics and Gynecology, 48(3); 2005

Review of all currently used materials in pelvic floor surgery including Tutoplast Fascia lata.

FL-U 19 GROUTZ A et al.

Use of cadaveric solvent-dehydrated fascia lata for cystocele repair-preliminary results

Urology, 58(2); 2001

In 21 patients a cystocele was treated with Tutoplast Fascia lata. Follow-up was 12-30 months. All but 2 were continent.

FL-U 20 HAIRSTON J and G GAMAL

The male perineal sling enhances the distal shincteric mechanism: Fluorourodynamic study.

Abstract. Int. Continence Society. Annual Meeting, Heidelberg, Germany, 2002

www.icsoffice.org

28 patients with urinary incontinence after prostatectomy were treated with Tutoplast Fascia lata. All but one were significantly improved.

FL-U 21 HUANG Y-H et al.

High failure rate using allograft fascia lata in pubovaginal sling surgery for female stress incontinence

Urology, 58; 2001

Report on 18 patients who had sling surgery with a 2x7cm Tutoplast Fascia lata. Follow up was 9.2 (6.9-11.6) months. 5 patients experienced a recurrence after 3 to 6 months. A special suture fixation technique was used that was different from all others described so far. This is the only paper on the use of Tutoplast Fascia lata reporting a high failure rate.

FL-U 22 KEIL K et al.

Objective outcomes from the use of Tutoplast cadaveric fascia lata allograft for the surgical treatment of posterior vaginal wall prolapse

Abstract. Society of Gynaecologic Surgeons, 32nd Scientific Meeting, Tuscon, AR, 2006

Retrospective study on 56 patients. Objective cure rate at 12 months or longer was 93,9%.. The authors conclude that Tutoplast Fascia lata is safe and effective in the treatment of posterior vaginal wall prolapse.

FL-U 23 KOBASHI KC et al.

A new technique for cystocele repair and transvaginal sling : the cadaveric prolaps repair and sling (CaPS)

Urology, 56, Suppl. 6A; 2000

Detailed description of a new technique using Tutoplast Fascia lata. 50 patients were treated with this technique and followed after 6 months. 72% were cured and there was no prolaps recurrence.

FL-u 24 KOBASHI KC et al.

Continued multicenter follow-up of the cadaveric prolaps repair with sling

The Journal of Urology, 168(11); 2002

Continuation of the previous study. A total of 172 patients were treated. 132 could be followed 6-28 months. 108 were free of stress incontinence, 26 suffered from persisting urge incontinence and 8 developed de novo urge incontinence.

FL-U 25 KOBASHI KC and F GOVIER

The use of solvent-dehydrated cadaveric fascia lata (Tutoplast) in slings and cystocele repairs: the Virginia Mason experience.

Abstract. Int. Continence Society. Annual Meeting. Heidelberg, Germany. 2002

www.icsoffice.org

Report on 134 patients treated with Tutoplast Fascia lata. The results are rated excellent.

FL-U 26 KWON C et al.

Protective effect of transvaginal slings on recurrent anterior vaginal wall prolaps after reconstructive surgery.

Abstract. Int. Continence Society. Annual Meeting. Heidelberg, Germany. 2002

www.icsoffice.org

Report on a randomised study comparing traditional treatment and additional use of Tutoplast Fascia lata. With Tutoplast the recurrence rate could be lowered from >30% to <3%.

FL-U 27 LEACH G et al.

Transvaginal cadaveric fascial prolaps repair with sling (CaPS): five-year prospective follow-up

Abstract. Int. Continence Society. Annual Meeting. Florence, Italy. 2003

210 patients treated with Tutoplast were followed 6-60 months. 76% had improvement by >50%. Two developed a cystocele recurrence.

FL-u 28 LEACH G and R FREDERICK

Transvaginal cadaveric fascia lata repair of rectocele (CAR procedure): three year prospective follow-up.

Abstract. Int. Continence Society. Annual Meeting. Paris, France. 2004

33 women had rectocele repair with Tutoplast Fascia lata. After 6-37 months 31 were without recurrence. In 19 bowel function was significantly improved.

FL-U 29 LEACH G and R FREDERICK

Cadaveric fascial transvaginal sling (CATS): five-year prospective follow-up.

Abstract. Int. Continence Society. Annual Meeting. Paris, France. 2004

265 women treated with Tutoplast Fascia lata were followed 12-65 months. The objective cure/improvement rate was 75%, the subjective was 87%.

FL-U 30 McALLISTER W and R MORLEY

Cadaveric fascia lata sling repair – initial results at two year follow-up.

Abstract. Int. Continence Society. Annual Meeting. Heidelberg, Germany. 2002

28 women treated with Tutoplast Fascia lata were followed after 22-30 months. 24 were cured and 3 improved.

FL-U 31 McBRIDE AW et al.

Comparison of long-term outcomes of autologous fascia lata slings with Suspend Tutoplast fascia lata allograft slings for stress incontinence.

Am J Obstet Gyn, 192; 2005

Urodynamic results and subjective rating were evaluated in 39 women with autograft and 32 with allograft. While urodynamic values were significantly better in the autograft group, no difference was found in the subjective rating between the groups.

FL-U 32 MILLER JR et al.

Comparison of porcine dermis and cadaveric fascia lata for the treatment of genuine stress incontinence and low pressure urethra with a transvaginal Cooper's ligament sling: a retrospective cohort study

Abstract. International Continence Society, Annual Meeting, Montreal, Canada 2005

Report on 232 patients. 165 had Tutoplast Fascia lata and 67 porcine dermis. Results were comparable but 6% with porcine dermis needed urethrolisis but only 1% with fascia.

FL-U 33 SEEGER D et al.

Rectocele repair using biomaterial implants – anatomic outcome associated with improvement of obstructive defecation, fecal incontinence and vaginal discomfort: a prospective randomised controlled trial.

Abstract. Int. Continence Society. Annual Meeting. Montreal, Canada. 2005

www.icsoffice.org

In 10 patients Tutoplast Fascia lata and in 12 porcine dermis was used for rectocele repair. After 6 months 80% in both groups were cured.

FL-U 34 TUNN R et al.

Charite-specific urinary incontinence surgeries: 2. Fascia lata bridge plasty (Charite-spezifische Harninkontinenzoperationen 2. Fascia lata Brückenplastik)

Gynäkol Prax, 22, 1988

Detailed description of indication and technique the latter illustrated with colour drawings. Results of 55 patients treated with Tutoplast fascia lata are presented. After 2 years all patients with pure stress incontinence were cured (90.9%) or improved (9.1%). In patients with mixed incontinence 15.1% showed no improvement.

FL-U 35 TUNN R et al.

Vaginal incontinence surgery with tissue replacement (Vaginale Inkontinenzchirurgie mittels Gewebeersatz)

Abstract. www.thieme.de/abstracts/gebfra/abstracts2000/daten/17_05_05.html

Report on 55 patients treated with Tutoplast Fascia lata and 45 with Prolene strips all 5x1.5cm, fixed tension-free between the levator muscles were followed for 2 years (Fascia) and 5 months (Prolene). 1% in the fascia group were cured or improved compared to 95.5% in the Prolene group. In the latter group there were 3 cases with residual urine, 5 with wound healing disturbance and 1 with post op fever. No such complications occurred in the fascia group. (Abstract in German, English translation available. Tutoplast not specifically mentioned but the hospital used it exclusively)

FL-U 36 KALSI JS et al.

Plaque incision and fascia lata grafting in the surgical management of Peyronie's disease

GJU Int, 98(1); 2006

Report on 14 patients treated with Tutoplast Fascialata. The authors conclude that Tutoplast is a reliable and well tolerated material and used by experienced surgeons excellent results can be expected.

FL-U 37 FRANCO N et al.

Medium-term follow-up of transvaginal suburethral slings. Variance in outcome success using two different evaluation methods

Urology, 66; 2002

107 patients were treated with either autologous fascia, Tutoplast Fascia lata or another allogenic fascia. Patients were asked using a new score. 65 answered. Results were compared with patient records. Significant differences were found.

FL-U 38 KOBASHI KC et al.

Initial experience with rectocele repair using nonfrozen cadaveric fascia lata interposition

Urology, 66; 2005

73 patients were treated with Tutoplast Fascia lata and asked to answer a questionnaire. 62 answered after an average of 13.7 months(6-23). 49 of them had no problems with defaecation.

FL-U 39 HARTANO VH et al.

Comparison of recovery from postoperative pain utilizing two sling techniques

Can J Urol, 10(1); 2003

Retrospective comparative study. 30 patients had the Vesica sling fixed to bone anchors placed coronally in the pubic bone and 34 had Tutoplast Fascia lata fixed to bone anchors placed transvaginally. Surgical time and hospital stay were shorter in the Tutoplast group and patients were significantly faster painfree.

FL-U 40 NAZEMI T et al.

SUFU 2007 – cadaveric fascial sling. Minimum of 24 months follow-up

www.urotoday.com/index2.php?option=com_content&task=view&id=2204316

Abstract. From 353 patients treated with Tutoplast Fascia lata 342 had follow-up of minimum 24 months and were asked to fill a questionnaire. 795 of the procedures were successful. The authors conclude that the results with Tutoplast continue to be comparable with those with synthetic slings.

FL-U 41 AMRUTE KV and GH BADLANI

Female incontinence: a review of biomaterials and minimally invasive techniques

Curr Opin Urol, 16; 2006

Overview. Several articles with Tutoplast Fascia lata are cited. The authors conclude: synthetic grafts may provide durability but the risks of erosion and dyspareunia exist. Proper selection of graft material, synthetic or biologic, may be eventually based on patient's lifestyles.

FL-U 42 CARABALLO R et al.

Comparison of pelvic floor tissue-based repair products

Abstract. International Continence Society, 2004, Paris, France

www.icsoffice.org

Five different biological sling materials were tested for tensile strength in two directions and suture pull out, among them Tutoplast Fascia lata (Suspend). As was to be expected the strength of Tutoplast along the main fiber direction was comparable to the other materials with threedimensional fiber arrangement while across the fibers it was significantly lower as was suture pull out strength. This underscores the need for a special technique for Tutoplast Fascia lata.

FL-U 43 GOVIER FE and K KOBASHI

Pubovaginal slings: a review of the technical variables

Current Opinions in Urology, 11; 2001

Review of surgical treatment options. In the chapter Cadaveric fascia allografts the authors write: we have stopped using tissue bank fascia and are now using solvent dehydrated proprietary fascia lata and dermis.

FL-U 44 KOBASHI K et al.

Early results with the cadaveric transvaginal sling for treatment of female stress urinary incontinence

Lecture at an AUA Postgraduate Course.

The authors rate their early results with Tutoplast Fascia lata as excellent. The CAPS technique is detailed with pictures.

FL-U 45 LEE YS and CW RHO

Comparison between cadaveric fascia lata and autologous rectus fascia in the pubovaginal sling operation

Korean J Urol, 41; 2000

Review of 6 patients with rectus fascia and 15 patients with Tutoplast Fascia lata. Both showed equally high success rates. (Article in Korean with English abstract and English presentation slides)

Orthopedics

FL-OR 1 AKIZUKI S et al.

Arthroscopic examinations after reconstruction of the anterior cruciate ligament with dehydrated human femur fascia (Fascia lata Pfrimmer)

Kansetsukyo, 13; 1988

Report on 16 cases. In 4 cases Tutoplast Fascia lata was used for reinforcement of a primary suture, in 4 as reinforcement of an fascia lata autograft and in 8 cases together with a synthetic ligament to stimulate fibrous ingrowth. All cases were successful. (article in Japanese, English translation available)

FL-OR 2 BAE DK et al.

Reconstruction of achilles tendon using fascia lata allograft. A case report.

J Korean Orthop. Soc. 29(2); 1994

Case report on the successful reconstruction of an Achilles tendon defect after tumor resection. (article in Korean with English abstract and picture explanations)

FL-OR 3 HEY W et al.

Advantages and disadvantages of homologous anterior cruciate ligament repair compared to autologous grafts (Vor- und Nachteile der homologen vorderen Kreuzbandplastik im Vergleich zum autologen Transplantat)

Kreuzbandplastik im Vergleich zum autologen Transplantat)

Abstract. Union Schweizerischer Chirurgischer Fachgesellschaften, Luzern, 1986

10 patients each recieved either a patella tendon autograft or a strip of Tutoplast Fascia lata for ACL replacement. After an average of 18 months no difference was found in subjective assessment while the objective outcome was better in the autograft group.

FL-OR 4 INOUE et al.

Reconstruction of a chronic achilles tendon rupture using fascia lata allograft: A case report.

J Clin Sports Med, 6; 1989

An Achilles tendon defect 4 cm in length was repaired with Tutoplast Fascia lata. After one year muscle strength of the affected leg had reached that of the contralateral leg. A biopsy revealed the typical histology of a tendon. (article in Japanese, English translation available)

FL-OR 5 ITO J, MORIOKA T

Surgical treatment for large and massive tears of the rotator cuff

International Orthopedics, 27; 2003

21 out of 65 patients who had surgical repair of the rotator cuff could be followed for a minimum of 2 years. 9 of them had a Tutoplast Fascia lata and the others suturing only. The authors prefer the patch technique because of the better results.

FL-OR 6 KOBAYASHI S et al.

Reconstruction of the four major ligaments in an unstable knee joint after dislocation by solvent-preserved human fascia lata transplantation – A case report.

Arch Orthop Trauma Surg, 108(4); 1989

The four major ligaments in a totally dislocated knee were reconstructed with two strips of Tutoplast Fascia lata. Arthroscopy after one year revealed ligaments of normal thickness and tension. Histology showed normal, vital ligament structure.

FL-OR 7 MUNETA T et al.

A technique for reconstruction of the medial patellofemoral ligament

Clin Orthop Rel Res, 359; 1999

A detailed description of a new technique is given and results in 6 patients presented. While 5 received an autograft, semitendinosus(1) and gracilis(4) one, a professional sumo wrestler, received Tutoplast fascia lata to avoid the morbidity of autograft harvest. Results were good in all patients.

FL-OR 8 NAKATA et al.

Reconstruction of the lateral ligaments of the ankle using solvent-dried and gamma-irradiated allogenic fascia lata.

J Bone Joint Surg 82 ; 2000

20 patients with ligament reconstruction using Tutoplast fascia lata were re-examined after 3-10 years. The result was excellent in 12, good in 7 and moderate in 1.

FL-OR 9 POULIART N and F HANDELBERG

Tendon graft reconstruction for acute grades IV and V acromio-clavicular dislocation. Short-term results.

Slide presentation at the GESTO Meeting, Bruxelles, Belgium, 2005

Presentation of 25 patients treated with Tutoplast Fascia lata. Two strips of Fascia were sutured together and rolled lengthwise. 14 patients had excellent results after 3 months and 4 others with good or fair results at 3 months reached excellent results at 6 months. 4 patients were lost for follow up.

FL- OR 10 SUEYOSHI Y et al.

Anterior cruciate ligament reconstruction with solvent-preserved human fascia lata allograft

The 5th Meeting of the Asia-Pacific Association of Surgical Tissue Banking, Suzhou, China, 1994

15 patients had ACL replacement with Tutoplast Fascia lata in combination with autogenic fascia lata or semitendinosus tendon. 3 patients developed an infection and one of them had to be revised. All others had stable knees after one year.

Laboratory Studies

FL-L 1 ALEXIANU M et al.

Effect of fibroblast proteases on tensile strength of various pubovaginal sling materials

Abstract. Engineering & Urology Society, Annual Meeting, 2001

http://engineering-urology.org/am/16SUE_2001.html

Patches 1x1cm from various materials were incubated with human fibrosarcoma cell derived collagenase and elastase for 4 days. Tensile strength was then measured and compared to untreated samples. While Alloderm and freeze-dried fascia lata showed no change in strength, indicating the denaturation of these products, Tutoplast Fascia lata showed a reduction of 36%, indicating the easy absorbability and remodelling capacity.

FL-L 2 CARABALLO R et al.

Comparison of pelvic floor tissue-based repair products

Abstract. Int. Continence Society, Annual Meeting, Paris, 2004

www.icsoffice.org

Various materials of biological origin offered for pelvic floor reconstruction, among them Tutoplast Fascia lata, were analyzed for their biomechanical properties. The authors conclude that all were sufficiently strong.

FL-L 3 HATHAWAY JK and JM CHOE

Intact genetic material is present in commercially processed cadaver allografts used for pubovaginal slings

J Urol, 168(9); 2002

Ten samples each of 4 differently processed human tissues including Tutoplast Fascia lata were analysed for the presence of DNA using PCR analysis. Only 9 of the 10 Tutoplast samples contained detectable DNA with a maximum chain length of 400 base pairs. All others had DNA with chain length up to 2000 base pairs, the detection limit of the test used.

FL-L 4 HINTON R et al.

A biomechanical analysis of solvent dehydrated and freeze dried human fascia lata allografts. A preliminary report.

Am J Sports Med, 20(5); 1992

Pieces of 4x20 cm Tutoplast fascia lata and freeze-dried, non-irradiated fascia lata were divided into pieces of 1x4cm and tested for tensile strength. Tutoplast had significantly higher strength and a more uniform distribution over the area.

FL-L 5 LEMER et al.

Tissue strength analysis of autologous and cadaveric allografts for the pubovaginal sling.

Neurourol Urodyn 19; 1999

Tissue strength of autologous rectus fascia harvested during incontinence surgery from 20 patients aged 32-76 was compared with Tutoplast Fascia lata, freeze-dried fascia lata and AlloDerm. Freeze-dried fascia was significantly weaker than the other 3 tissues that had about the same strength.

FL-L 6 MOORADIAN DL et al.

Residual DNA in biological sling materials: a comparison between PO-treated bovine pericardium, human dermis, solvent-extracted and freeze-dried cadaveric fascia lata

Abstract. Engineering & Urology Society, Annual Meeting, 2002

http://engineering-urology.org/17SUE_2002.html

The DNA content in some biological materials, among them Tutoplast Fascia lata was measured in µg per mg tissue. The PO-treated pericardium had the lowest content followed by Tutoplast. The significance level was $p=0.165$. Nothing is said about the quality of the DNA (see FL-L 2)

FL-L 7 SCLAFANI AP et al.

Biophysical and microscopic analysis of homologous dermal and fascial materials for facial aesthetic and reconstructive uses.

Arch Facial Plast Surg, 4(3); 2002

Four differently processed tissues, among them Tutoplast Fascia lata were analysed microscopically and biomechanically. Tutoplast was the strongest and had a structure close to native fascia.

FL-L 8 SCHICK B et al.

Dural cell culture. A new approach to study duraplasty.

Cells Tissues Organs 173; 2002

Human dural fibroblasts were cultured on Tutoplast Fascia lata, costal cartilage and polydioxanone and analysed for multiplication, migration and metabolism. Only on Tutoplast normal growth with complete overgrowth was observed.

FL-L 9 ÜNSAL B et al.

Evaluation of initial attachment of human gingival fibroblast cells to biodegradable membranes in vitro by light and scanning electron microscopy

Journal of Oral Science, 41(2); 1999

Various synthetic and natural absorbable membranes, among them Tutoplast Fascia lata were tested. After one hour of incubation attached cell were counted. While all collagen membranes had nearly identical numbers of cells attached it was only half on the synthetic membrane.

FL-L 10 VandeVord PJ et al.

The effect of DNA extracts from urological tissue matrices

Abstract. Society for Biomaterials, Annual Meeting, Pittsburgh, 2006

7 different tissues, among them Tutoplast Fascia lata and Tutoplast Dermis, were analyzed for DNA content. Extracted DNA was then incubated with fibroblasts. A stimulation of fibroblast growth was found at a concentration of more than 5ng/μL. AlloDerm contained a multitude of DNA compared to all other materials.

Animal studies

FL-AS 1 DORA CD et al.

Time dependent variations in biomechanical properties of cadaveric fascia, porcine dermis, porcine small intestine submucosa, polypropylene mesh and autologous fascia in the rabbit model: implications for sling surgery

The Journal of Urology, 171; 2004

One of the cadaveric fascia mentioned in the title was Tutoplast. The other was freeze-dried. All 6 materials were implanted for an intraindividual test in a midline abdominal incision in 15 rabbits and tested for tensile strength and stiffness after 2, 6 and 12 weeks. Tutoplast had the highest stiffness, the decisive value according to the authors, at the beginning and despite a reduction over time still the highest stiffness at 12 weeks.

FL-AS 2 FILIPPI R et al.

Tightness of duraplasty in rabbits: a comparative study

Neurosurgery, 46(6); 2000

Various materials offered for duraplasty, among them Tutoplast Fascia lata were tested for tightness in rabbits after 3 days with and without fibrin glue, 3 weeks and 3 months. The leakage pressure for Fascia after 3 days without fibrin glue was 22.9-30.8 mmHg, well above normal and even pathologic values.

FL-AS 3 KAPAN S et al.

Comparison of PTFE, pericardium bovine and fascia lata for repair of incisional hernia in rat model, experimental study

Hernia, 7(1); 2003

Tutoplast fascia lata, Tutopatch and PTFE were implanted into the abdominal wall of rats. Bursting pressure was measured after one and two weeks. As was to be expected the bursting pressure was lower with fascia than with the other two materials.

FL-AS 4 KIM HL et al.

Comparison of the durability of cadaveric and autologous fascia using an in vivo model

Urology, 58; 2001

Autologous rectus fascia of rats, Tutoplast processed rectus fascia of rats and Tutoplast Fascia lata were implanted subcutaneously in rats and tested mechanically and histologically after 2 and 4 months. No difference in biomechanics were found between the rat fascia. Tutoplast Fascia lata was initially stronger but lost more of its initial strength(46%) than the rat fascias(30%).

FL-AS 5 KLAPPER SR et al.

Hydroxyapatite implant wrapping materials: analysis of fibrovascular ingrowth in an animal model

Ophthal Plast Reconstr Surg, 16(4); 2000

Various materials for orbital implant wrapping, among the Tutoplast Fascia lata were tested for fibrovascular ingrowth in rabbits. complete ingrowth occurred in all materials by 12 weeks.

FL-AS 6 PESCH H-J

Solvent-preserved grafts of dura mater and Fascia lata (Collagen grafts). Studies on their tissue tolerability in animals

In: Williams HB (Ed.) Transactions of the VIII International Congress of Plastic and Reconstructive Surgery, Montreal, Canada; 1983

Tutoplast Dura and Tutoplast Fascia lata patches 10x5mm were implanted into abdominal muscle defects of rats and examined histologically after 1, 2, 4, 7, 10 and 14 days and 3, 4 8 12 and 16 weeks. In another animal group the grafts were implanted sequentially in 4-week intervals up to 4 times and examined histologically in intervals up to 3 months. Both grafts were absorbed and replaced by vascularised connective tissue within the same time frame. No immunological reactions were found after multiple implantations. foreign body giant cells were seen only around the suture material.

FL-AS 8 PESCH H-J, HR STÖSS

Solvent preserved Fascia lata- animal experimental evaluations on tissue tolerability of a new connective tissue graft (Lösungsmittelkonservierte Fascia lata – Tierexperimentelle Untersuchungen zur Gewebeverträglichkeit eines neuen Bindegewebs transplantates)

In: Jungbluth KH and U Mommsen (Ed.) plastische und wiederherstellende Maßnahmen bei Unfallverletzungen – Springer, 1984

German version of the afore listed article.

FL-AS 9 PESCH H-J

Dura mater and fascia lata as connective tissue grafts. Experimental evaluations in animals (Dura mater und Fascia lata als Bindegewebs transplantate. Tierexperimentelle Untersuchungen)

Biomedizinische Technik Band 30, Ergänzungsband Sept. 1985

Tutoplast Fascia lata and Dura and glycerol-impregnated and silicone coated grafts were evaluated. While Tutoplast was remodelled the other two grafts showed only little remodelling and tended to calcify.

FL-AS 10 ÜNSAL B et al.

An investigation of resorption and tissue reaction after subcutaneous implantation of collagen based membrane materials in rats

Journal of Marmara University Dental Faculty, 2(4); 1997

Various collagen membranes, among them Tutoplast Fascia lata were subcutaneously implanted into the back of rats and histologically examined after 7, 14, 28 and 42 days. Remodelling of Fascia lata was faster at 42 days than that of Tutoplast Dura and temporalis fascia but still not complete. No signs of foreign body reaction or rejection were found.

FL-AS 11 YILDIRIM A et al.

Tissue reactions of 5 sling materials and tissue material detachment strength of 4 synthetic mesh materials in a rabbit model

J Urol, 174; 2005

4 synthetic nonabsorbable slings and Tutoplast Fascia lata were tested intraindividually in the rectus muscle and subfascially in the upper extremity. Detachment strength and histology was examined after 2, 7, 15 and 30 days. Detachment was not measured with Tutoplast that showed more intense cellular infiltration at all times.

FL-AS 12 AYYILDIZ A et al.

A comparison of free skin graft, fascia lata, alloderm, bovine pericardium and primary repair in urethrocutaneous fistulas without diversion: an experimental study

Pediatr Surg Int, 22; 2006

Comparative study with different collagen membranes, among them Tutoplast fascia lata(not mentioned in the article but confirmed by the corresponding author via e-mail). Fascia lata had the second highest score.

FL-AS 6 KRAMBECK A et al.

Time dependent variations in inflammation and scar formation of six different pubovaginal sling materials in the rabbit model

Urology, 67(5); 2006

Various sling materials, among them Tutoplast Fascia lata were implanted on the anterior rectus fascia of rabbits and examined histologically after 6 and 12 weeks. At 12weeks all materials showed strong scar formation with the strongest with polypropylene.