

## **Lymphedema of Male Genitals: Materials and Techniques in Elastic Compression**

**Objective:** Primary and secondary lymphoedema involving male genitals, represent always a real challenge due to different aspects.

First of all, locations are rather different among the different cases notwithstanding the limited interested area (scrotum only, penis only, both or half section of them).

Also consistency can create an obstacle for a proper compression, because, for example, a soft oedema could be reduced in few hours but in this case is necessary to renew the bandage to adapt it to the new dimensions, but this is not possible in the majority of cases.

Hard consistency (generally of the scrotum), on the contrary, is an advantage for the permanence of bandage for a longer time, but results are expected not so early.

A real problem is represented in case of penectomy or in case of a real big dimension of the scrotum up to include penis inside, covering it. It is the situation in which bandage, covering all the surface, became wet at the first urination and must be removed.

**Material and Methods:** Materials of bandage in male genitals are, due to the shapes, for the most part, cohesive, integrated often with short stretch bandage for, i.d. , overlapping around hips. Also thin polyurethane is useful to avoid slipping between bandage and skin without create an excessive volume. In case of acute DLA, zinc oxide base layer is useful too, with its peculiar action against the phlogosys.

Also in choice of the final garment, customization is fundamental. Great difficulties are represented again by the shape of the area. In the most part of cases most effectiveness tissue is made of tubular knitting, to obtain a passive effect of compression.

**Results:** Among 27 treated cases, 17 showed an oedema involving scrotum and penis, 6 involved penis and upper pubis, in 4 was located only on scrotum.

In 15 cases also tigh was proximally bilaterally swollen. This put important conditions to project a garment considering the interaction of the two different needing.

**Conclusions:** Lymphedema of the male genitals represents a great challenge in all affected patients, not depending on dimensions but on difficulties to apply a compression above all the final one represented by garment.

## **Curriculum Vitae**

Born in Rome in 1967-09-18

### **Course of Study**

- Special Purpose Direct School Diploma "Rehabilitation Therapist" achieved at the University of Rome "La Sapienza" in 1989 with a mark of 70/70 cum laude.
- Adaptation of the forementioned title to "First level degree in physiotherapy" at the University of Rome "Tor Vergata" in 2004 with 110/110 cum laude.
- Master at the University "La Sapienza" of "Management for the coordination functions of the health professions of rehabilitation" Year 2011 with 110 cum laude.

### **Work Experiences**

- From June 16, 1992 to date, he has been employed for an indefinite period at the St. John the Baptist Hospital of the Sovereign Military Order of Malta in Rome.
- From April 2004 to 2011 he carried out at the same time outpatient activity agreed in Ex Article 26 at the Vascular Rehabilitation clinic of the Vaclav Vojta Center in Rome.
- Since 1996 he has been a member of the European Society of Lymphology.
- Since 2006 he is Assistant Editor of the "European Journal of Lymphology and Related Problems" official organ of the European Society of Lymphology.
- Since 2001 he has been a member of the International Society of Lymphology.
- In 2011/2012 he was a director of the Italian College of Phlebology

### **Publications**

- Author of the book "THEORETICAL PRACTICAL MANUAL OF VASCULAR REHABILITATION" ED. Pierre 2004.
- Author of the booklet "ELASTOCOMPRESSION IN THE LYMPHEDEMA" ED. CIZETA 2010
- Co-author of the book "IL FLEBOLINFEDEMA: FROM DIAGNOSIS TO THERAPY"
- Co-author of dozens of articles in journals of phlebolympological interest in the field of vascular rehabilitation.

### **Teaching**

From 1996 to date he has taught in numerous Vascular Rehabilitation courses of his own or others' organization both in the headquarters and in the ASL of various regions of Italy by specific invitation.

### **Participation in Conferences as Speaker / Moderator**

- XXI Congress of the European group of Lymphology - Rome 1996
- I ° Congress of the Central European Vascular Forum - Prague 1998
- XXIV Meeting of the Groupement Europeen de Lymphologie - Castellabate 1998
- XXV European Congress of Lymphology - Thessaloniki 1999
- Meeting elaboration of the study protocol on lymphedema National Institute for the Study and Treatment of Tumors - Milan 2000

- XVIII International Congress of Lymphology - Genoa 2001
- XVII International Congress of Lymphology - Chennai - India 1999
- Specialization course in Lymphology - Genoa 2002
- III Workshop "Integrated treatment of phlebolympheidema" - Bologna 2002
- XXVIII Congress of the European Group of Lymphology - Milan 2002
- Award of the XVIII International Congress of Lymphology for the best scientific contribution
- XXVII Scientific Meeting of the European Group of Lymphology - Porto 2001
- I ° Simpozion national de limfologie - Timisoara 2000
- XXVI Congres Europeen de Lymphologie - Nancy 2000
- Master in Angiology from the Academy of Health History - Rome 1999
- XIX International Congress of Lymphology Freiburg - Germany 2003
- XXIX Congress of the European Society of Lymphology - Malmo Sweden 2003
- 13th Congress of Mediterranean League of Angiology and Vascular Surgery - Siracusa 2003
- 1st National Training Course in Lymphology - Genoa 2003
- Course of Diagnosis and Treatment of Phlebolympheidema - Bologna 2004
- XXX Scientific Meeting of the European Lymphology Group - Brussels 2004
- III National Congress of Oncological Lymphology - Milan 2006
- XXXIII Congress of the European Group of Lymphology - Prague 2007
- Course "Angiology 2007" - S. Giovanni Rotondo 2007
- Theoretical-Practical Post-University Course of Angiology - Rome 2007
- XXI International Congress of Lymphology - Shanghai 2007
- University Course in "Oncological Lymphology" - Milan 2008
- Day of Constitutional Law for the protection of health - Rome 2008
- CIZETA medical convention - Riccione 2008
- Conference "Lymphatic surgery, microsurgery and anesthetic techniques" - Genoa 2008
- I ° National Congress "Lymphedema Planet" - Terni 2008
- Conference "Skin ulcers and non-traumatic amputations of the lower limb" - Caserta 2008
- XXII International Congress of Lymphology - Sydney 2009
- Conference "Lymphedema and guidelines" - Pavia 2009
- Conference "The microsurgery of lymphatics" - Genoa 2009
- Conference "Age and Health forum" - Catanzaro 2009
- XX International Congress of Lymphology - Salvador de Bahia 2005
- XXXVI Congress of the European Society of Lymphology - Athens 2010
- Workshop SO.PA.CHI.VA.LA.ME. - Naples 2010
- IV Theoretical and practical refresher course in Vascular Pathologies - Vietri sul Mare 12-13 / 11/2010
- Conference "Phlebological addresses at the dawn of the third millennium" Rome 02/18/2011
- 37th European Congress of Lymphology - Warsaw 3-4 / 06/2011
- Conference "The elderly patient and risk factors" Rome 26-05-2011
- 23rd International Congress of Lymphology Malmo Sweden 19-23 / 09/2011
- XV National Congress of the Italian College of Phlebology Ferrara 29-30 September-1 October 2011
- XXI Annual Meeting of the Mediterranean League of Angiology and Vascular Surgery Genova 1-3 / 12/2011
- XXIV I.S.L. Congress Rome 13-20 September 2013
- V National Congress SIMFER Section Edema Abano Terme 30-31 / 3/2012
- XVI Congress of the Italian College of Phlebology Naples 4-5-6 / 10/2012
- "LymphoLab" Congress Savona 9 June 2012
- 38th European Congress of Lymphology Berlin 13-14-15 / 09/2012
- 39th European Congress of Lymphology Valencia 5-6-7 / 06/2013

- 24th International Congress of Lymphology Rome 15-20 / 09/2013
- 40th European Congress of lymphology Genova 13-15-09 / 2014