Activities and effects of qualification system of elastic compression stocking conductor of Japanese Society of Phlebology

Japanese approach

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- Not much of medical staffs know about stocking or bandage.
 - No time for M.D., outpatient nurses and ward nurses
 - Who educate patients about compression ?
 - Who listen to patients word?
- By increasing the number of medical professionals with knowledge of compression therapy, we try to increase patients compliance.

Elastic stocking conductor

Establishment of qualification system of elastic compression stocking conductor of JSP

- Japanese Society of Phlebology (JSP) established qualification system of elastic compression stocking (ECS) conductor in 2002 by professor Masafumi Hirai.
- to promote proper usage of ECS and elastic bandage
 - Including enhancement of compliance
- to prevent complication of ECS and elastic bandage
- for treatment and prevention of venous disease, and also treatment of lymphatic disease.

Japanese guideline for VTE prophylaxis was published in 2004.

- Based on ACCP guideline due to scare Japanese evidence
- Multiple society consensus including JSP.



肺血栓塞栓症 / 深部静脈血栓症 (静脈血栓塞栓症) 予防ガイドライン作成委員会 Editorial Committee on Japanese Guideline for Prevention of Venous Thromboembolism





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Japanese Medical Insurance Reimbursement of ECS and elastic bandage in 2004

- Reimbursement of management fee for prevention of pulmonary embolism prophylaxis was started in 2004
 - 305 points = approximately 30 Euro
 - Apply Only for high risk in-hospital patients
 - Should be managed under the guideline
 - Only for the patients who were applied ECS, elastic bandage or Intermittent pneumatic compression device(IPC)
- Management of secondary lymphedema in 2008
 - Up to approximately 300 Euro per half year

Perioperative pulmonary thromboembolism in Japan – Perioperative pulmonary thromboembolism research by the Japanese society of anesthesiologists (JSA-PTE research)



Incidence of Perioperative PE is 0.005%

J Anesth (2015) 29:433-441



J Anesth (2015) 29:433-441

These data is based on post operative PE patients, not all surgical patients

ECS conductor seminar



- Half day course with 100-300 attendees
- 8 seminar per year
- ECS conductor qualification is issued after 30 patients clinical experiences.
- Independent financials
 - Class fee: approx. 50-80Euro per attendee
 - Exhibition fee from stocking company: 300-500 Euro per company

ESC conductor seminar: Lectures





- Lectures
 - Anatomy, physiology & disease
 - Prevention of Deep vein thrombosis and PE
 - Lymphedema
 - Theory and practical usage of ECS and bandage
- Official Text

Example of Lecture slides

図4-6 各種弾性ストッキング



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Example of Lecture slides

図4-4 立位、運動時の圧迫圧の変化



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トップバンドの位置にスパッツなどを着用してもらずと防止できるター養成委員会

Example of Lecture slides

弾性ストッキングによる医療機器関 連圧迫創



後に閉塞性動脈硬化症の合併症が判明、下肢切断となった。

日本静脈学会 弾性ストッキングコンダクター養成委員会

Hands-on seminar of ECS & bandage

Hands-on with video viewing



How to apply elastic bandage with subbandage pressure measurement





Hands-on seminar Videos How to wear ECS with folding foot portion



Numbers of ECS conductors

Currently, **total number of ECS conductors exceed 2384** in 2017 and about 250 ECS conductors are qualified every year



Case of Increased compliance of compression therapy by meticulous consultation by ECS conductor







- 80's y/o Female
- Venous stasis ulcer due to immobilization and knee/ hip arthropathy.
- Difficult to reach bend her legs.
- Leg elevation was instructed.
- Compression therapy with **pressure guide cotton bandage (30 mmHg)** was started.

Elascot tension guide : Alcare

Worsen Venous Stasis ulcer after 3 months



Compri 2 BSN



Compression bandage was changed to pressure guide low stretch bandage (45 mmHg) because of no heeling of VLU.

- She started to complain of uncomfortableness and itching
- She finally rejected compression therapy





VLU worsened after 3 months

ECS conductor consultation

- <u>ECS conductor (outpatient nurse)</u> consulted her meticulously for long time.
- She found the reason of poor compliance of compression therapy and poor hygiene.
- She was living alone and depressed.
- A <u>visiting nurse</u> was introduced and <u>her son</u> living abroad was informed about his mother's condition.
- Compression therapy was <u>restarted with pressure</u> guided cotton bandage (30 mmHg) and the pressure was increased up to 45mmHg with increasing overlap.





Half overlap 30mmHg



2/3 overlap 45mmHg

Venous stasis ulcer was Cured after 5 months



Introduction of **visiting nurses and home helpers** to help compression therapy. Finally her son came back from abroad and her depression disappeared.

Conclusions

Activity of ESC conductors for better compliance

- ECS conductors are currently working
 - in the outpatient clinic for treatment of venous disease and lymphedema
 - at inpatients ward for prevention VTE.
- ECS conductors with good knowledge of ECS, bandages and diseases help to increase the compliance regarding compression therapy by meticulous consultation.



Japanese Society of Phlebology will be held on June 14-15, 2018 in Yokosuka Japan