Kliiniline küsimus nr 1

Kas kõikidel veenihaigusega patsientidel kasutada kroonilise venoosse haavandi esmaseks/retsidiivi ennetamiseks meditsiinilist kompressioonravi vs venotoonikumi võrreldes mittekasutamisega?

Kriitilised tulemusnäitajad: haavandi teke, haavandi retsidiivi teke, ravisoostumus, patsiendi elukvaliteet, patsiendi rahulolu, elulemus, ravikulu

Süstemaatilised ülevaated

Kompressioonravi kroonilise venoosse haavandi esmaseks ennetamiseks
Süstemaatilisi ülevaateid, mis käsitleksid veenihaigusega patsientidel kompressioonravi venoosse haavandi tekke ennetamiseks, ei leidunud.

Kompressioonravi kroonilise venoosse haavandi retsidiivi ennetamiseks
2014.a. avaldatud Cochrane süstemaatilisse ülevaatesse kaasati neli uuringut, kus oli uuritud kompressioonravi efekti venoosse haavandi kordumise vähendamisele. Uuringud mõõduka või madala kvaliteediga. Ühes uuringus leiti, et kompressioonravi vähendab venoosse haavandi taasteket võrreldes kompressioonravi mitte kasutamisega. Ühes uuringus leiti, et venoosse haavandi retsidiveerumine on väikesem kasutades tugevat kompressioonravi võrreldes keskmise tugevusega kompressiooniga kolme aasta pärast, kuid teises uuringus ei leitud erinevust viie aasta möödudes. Kõrge oli kaasatud patsientide kompressioonravi mittetalumine. Kompressioonravi täpse valiku kohta uuringute põhjal soovitusi anda ei ole võimalik. (Nelson & Bell-Syer, 2014).

Venotoonikum
Süstemaatilisi ülevaateid, mis käsitleksid veenihaigusega patsientidel venotoonikumide kasutamist venoosse haavandi tekke ennetamiseks, ei leidunud.

On süstemaatilisi ülevaateid CVI sümptomide leevendamise kohta, kus on leitud nii kompressiooniravil kui venotoonikumide kasutamisel statistiliselt mitteoluline kasu. Metaanalüüsi tulemusena leiti, et hüdroksüetüülrutosiidid (venorutoon) vähendas valu, raskustunnet jalgades, krampe. Tõsiseid kõrvaltoimeid ravimi kasutamisel ei raporteeritud.

Venotoonikum
Süstemaatilisi ülevaateid, mis käsitleksid veenihaigusega patsientidel venotoonikumide kasutamist venoosse haavandi retsidiivi ennetamiseks, ei leidunud.

Viited

Kokkuvõtte (abstract või kokkuvõtlikum info)	**Viide kirjandusallikale**
A total of 121 titles were reviewed, 12 full-text publications were assessed for inclusion, and seven RCTs, including 703 patients, were selected for inclusion. Four trials assessed the effectiveness of drugs, including rutosides, hidrosmin, and defibrotide, and four trials assessed compression therapies for treatment of PTS. Systems for the diagnosis and classification of PTS severity varied across studies. Three of four drug therapy trials reported moderate improvement in selected PTS symptoms, minor changes in calf	Pharmacologic And Compression Therapies For Postthrombotic Syndrome Cohen JM, Akl EA, Kahn SR. Chest. 2012;141(2):308-320. doi:10.1378/chest.11-1175.

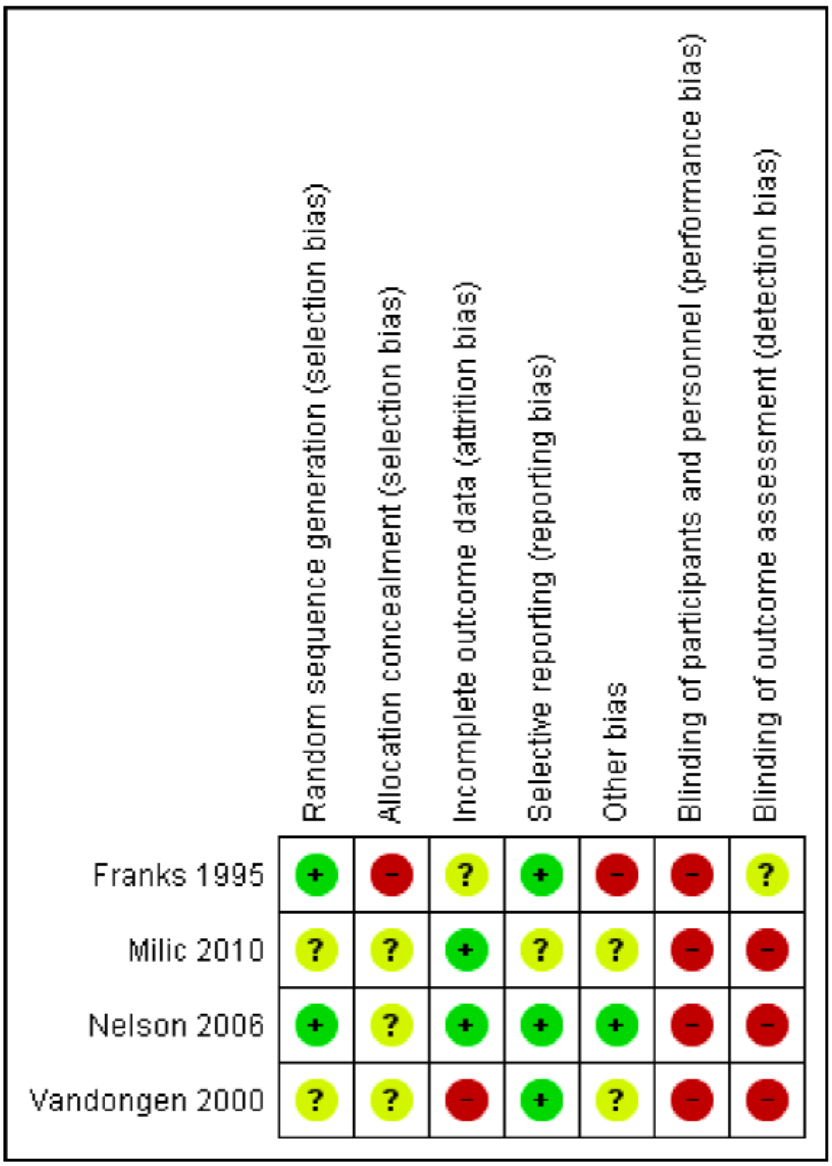
and ankle circumference, and some effects on ulcer healing. Two studies of compression stockings did not report benefit. Two studies that assessed compression devices reported improvement in PTS symptoms scores; one of these reported an improvement in quality-of-life score.	
We searched electronic databases such as the Cochrane Central Register of Controlled Trials (CENTRAL), MEDLINE, EMBASE and CINAHL, and publisher databases, conference proceedings and references lists for randomized controlled trials published in English and non-English languages. We also performed hand searches for additional trials. We included all trials that assessed the effectiveness of Hydroxyethylrutosides (HR) for CVI. Comparisons include HR (with or without compression bandaging) vs. placebo (with or without compression bandaging) or HR vs. compression bandaging alone. Two review authors independently selected studies, extracted data and assessed risks of bias in the included trials. RESULTS AND DISCUSSION: The search identified 1474 records. Only 15 trials involving 1643 participants met our inclusion criteria. A meta-analysis based on similar studies that compared HR with placebo showed that HR significantly reduced symptoms of pain (SMD -1·07, 95% CI -1·44 to -0·70), symptoms of heavy legs (OR 0·50; 95% CI 0·28-0·91) and cramps (SMD -1·07, 95% CI -1·45 to -0·69). No serious adverse effect due to HR was reported. WHAT IS NEW AND CONCLUSION: The findings showed that HR produced modest improvements in several symptoms of CVI. However, all the included trials were of limited quality, and therefore, better-quality trials are still required to draw firm conclusions on the usefulness of HR for CVI.	J Clin Pharm Ther. 2015 Apr;40(2):177-85. doi: 10.1111/jcpt.12247. Epub 2015 Jan 29. A systematic review of the efficacy and tolerability of hydroxyethylrutosides for improvement of the signs and symptoms of chronic venous insufficiency. Aziz Z1, Tang WL, Chong NJ, Tho LY.
OBJECTIVES: To review the efficacy and safety of oral horse chestnut seed extract (HCSE) versus placebo, or reference therapy, for the treatment of CVI. SEARCH METHODS: For this update the Cochrane Peripheral Vascular Diseases Review Group searched their Specialised Register (last searched June 2012) and CENTRAL (Issue 5, 2012). For the previous versions of the review the authors searched AMED (inception to July 2005) and Phytobase (inception to January 2001) for randomised controlled trials (RCTs) of HCSE for CVI. Manufacturers of HCSE preparations and experts on the subject were contacted for published and unpublished material. There were no restrictions on language. SELECTION CRITERIA: RCTs comparing oral HCSE mono-preparations with placebo, or	Cochrane Database Syst Rev. 2012 Nov 14;11:CD003230. doi: 10.1002/14651858.CD003230.pub4. Horse chestnut seed extract for chronic venous insufficiency. Pittler MH1, Ernst E.

reference therapy, in people with CVI. Trials assessing HCSE as one of several active components in a combination preparation, or as a part of a combination treatment, were excluded. DATA COLLECTION AND ANALYSIS: Both authors independently selected the studies and, using a standard scoring system, assessed methodological quality and extracted data. Disagreements concerning evaluation of individual trials were resolved through discussion. MAIN RESULTS: Overall, there appeared to be an improvement in CVI related signs and symptoms with HCSE compared with placebo. Leg pain was assessed in seven placebo-controlled trials. Six reported a significant reduction of leg pain in the HCSE groups compared with the placebo groups, while another reported a statistically significant improvement compared with baseline. One trial suggested a weighted mean difference (WMD) of 42.4 mm (95% confidence interval (CI) 34.9 to 49.9) measured on a 100 mm visual analogue scale. Leg volume was assessed in seven placebo-controlled trials. Six trials (n = 502) suggested a WMD of 32.1ml (95% CI 13.49 to 50.72) in favour of HCSE compared with placebo. One trial indicated that HCSE may be as effective as treatment with compression stockings. Adverse events were usually mild and infrequent. AUTHORS' CONCLUSIONS: The evidence presented suggests that HCSE is an efficacious and safe short-term treatment for CVI. However, several caveats exist and larger, definitive RCTs are required to confirm the efficacy of this treatment option.	
Four trials (979 participants) were eligible for inclusion in this review. One trial in patients with recently healed venous ulcers (n = 153) compared recurrence rates with and without compression and found that compression significantly reduced ulcer recurrence at six months (Risk ratio (RR) 0.46, 95% CI 0.27 to 0.76). Two trials compared high-compression hosiery (equivalent to UK class 3) with moderate-compression hosiery (equivalent to UK class 2). The first study (n=300) found no significant reduction in recurrence at five years follow up with high-compression hosiery compared with moderate-compression (RR 0.82, 95% CI 0.61 to 1.12). The second study (n = 338) assessed ulcer recurrence at three years follow up and found that high-compression hosiery reduced recurrence compared with moderate-compression (RR 0.57, 95% CI 0.39 to 0.81). Statistically significant heterogeneity precluded meta-analysis of the results from these studies. Patient-reported compliance rates were reported in both trials;,there was significantly higher compliance with medium-compression than with high-compression hosiery in one and no significant difference	Nelson EA, Bell-Syer SEM. Compression for preventing recurrence of venous ulcers. Cochrane Database of Systematic Reviews 2014, Issue 9. Art. No.: CD002303. DOI: 10.1002/14651858.CD002303.pub3.

in the second.

A fourth trial (166 patients) found no statistically significant difference in recurrence between two types of medium (UK class 2) compression hosiery (Medi versus Scholl: RR 0.74, 95% CI 0.45 to 1.2).

No trials of compression bandages for preventing ulcer recurrence were identified.



Authors' conclusions

There is evidence from one trial that compression hosiery reduces rates of reulceration of venous ulcers compared with no compression.

Results from one trial suggest that recurrence is lower in high-compression hosiery than in medium-compression hosiery at three

years whilst another trial found no difference at 5 years. Rates of patient intolerance of compression hosiery were high. There is insufficient evidence to aid selection of different types, brands, or lengths of compression hosiery.	

Ravijuhendid

Kokkuvõte ravijuhendites leiduvast **Esmane ennetus** AWMA (2011) soovitab esmaseks ennetuseks kompressioonravi venoosse haavandi tekkeriskiga haigetele, kellel ei ole kompressioonraviks vastuväidustatud. SIGN (2010) ei käsitlenud esmast ennetust. RNAO (2004) ei käsitlenud esmast ennetust. SVS_AVF (2014) soovitab C3-C4 ja klapipuudulikkusega haigetel 20-30mmHg kompressioonravi. C1-C4 posttrombootilise sündroomiga haigetel soovitatakse 30-40mmHg kompressioonravi. Farmakoloogilist (venotoonilist) ravi ei ole nendes ravijuhendites ennetamiseks käsitletud. **Retsidiivi ennetus** AWMA (2011) soovitab retsidiivi ennetuseks püsivat kompressioonravi. SIGN (2010) soovitab retsidiivi ennetuseks püsivat kompressioonravi. RNAO (2004) soovitab retsidiivi ennetuseks püsivat kompressioonravi. SVS_AVF (2014) soovitab retsidiivi ennetuseks püsivat kompressioonravi. Farmakoloogilist (venotoonilist) ravi ei ole nendes ravijuhendites venoosse haavandi retsidiivi ennetamiseks käsitletud.

(chronic[All Fields] AND ("varicose ulcer"[MeSH Terms] OR ("varicose"[All Fields] AND "ulcer"[All Fields]) OR "varicose ulcer"[All Fields] OR ("venous"[All Fields] AND "leg"[All Fields] AND "ulcer"[All Fields]) OR "venous leg ulcer"[All Fields])) AND (("pharmacology"[MeSH Terms] OR "pharmacology"[All Fields] OR "pharmacologic"[All Fields]) AND ("therapy"[Subheading] OR "therapy"[All Fields] OR "treatment"[All Fields] OR "therapeutics"[MeSH Terms] OR "therapeutics"[All Fields]))
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((chronic[All Fields] AND ("varicose ulcer"[MeSH Terms] OR ("varicose"[All Fields] AND "ulcer"[All Fields]) OR "varicose ulcer"[All Fields] OR ("venous"[All Fields] AND "leg"[All Fields] AND "ulcer"[All Fields]) OR "venous leg ulcer"[All Fields])) AND compression[All Fields]) AND ("prevention and control"[Subheading] OR ("prevention"[All Fields] AND "control"[All Fields]) OR "prevention and control"[All Fields] OR "prevention"[All Fields]) AND ((Randomized Controlled Trial[ptyp] OR Meta-Analysis[ptyp] OR systematic[sb]) AND ("2005/01/01"[PDAT] : "2015/03/31"[PDAT]))
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((chronic[All Fields] AND "varicose ulcer"[MeSH Terms]) AND compression[All Fields]) AND ("prevention and control"[Subheading] OR ("prevention"[All Fields] AND "control"[All Fields]) OR "prevention and control"[All Fields] OR "prevention"[All Fields]) AND ((Meta-Analysis[ptyp] OR Randomized Controlled Trial[ptyp] OR systematic[sb]) AND ("2005/01/01"[PDAT] : "2015/03/31"[PDAT]))
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