**Table D-4d. Outcomes reported for studies evaluating surgery as treatment of chronic venous ulcers (KQ3b)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Author, year** | **Group 1, N** | **Group 2, N** | **Outcome (definition)** | **Timepoint** | **Results , Group1** | **Results, Group2** |
| **Bello, 1999**[**71**](#_ENREF_71) | Other-other surgery, 111 | NA | time to complete closure (Ulcers were considered healed when full epithelialization had occurred; measured by computer- ized planimetry from tracings of the ulcer perimeter on transparent acetate sheets) | NA | Mean: 18 weeks (95% CI: 14 to 21) | NA |
| **Bello, 1999**[**71**](#_ENREF_71) | Other-other surgery, 111 | NA | prop ulcers healed (Ulcers were considered healed when epithelialization had occurred; measured by computer- ized planimetry from tracings of the ulcer perimeter on transparent acetate sheets) | 18 months | Total events: 92 | NA |
| **Cambal, 2008**[**69**](#_ENREF_69) | Superficial Vein Surgery-vein stripping; compression: multi layer, 39 | Perforator-SEPS; compression: multi layer, 56 | prop ulcers healed (% patients with event) | NR | Total both groups: 95% | NA |
| **Cambal, 2008**[**69**](#_ENREF_69) | Superficial Vein Surgery-vein stripping; compression: multi layer, 39 | Perforator-SEPS; compression: multi layer, 56 | time to complete closure (time to complete epithelialization in days) | NR | Final Mean (NS): 84 (8) | Final Mean (NS): 56 (6 |
| **Cambal, 2008**[**69**](#_ENREF_69) | Superficial Vein Surgery-vein stripping; compression: multi layer, 39 | Perforator-sclerotherapy; compression: multi layer, 698 | time to complete closure (time to complete epithelialization in days) | NR | Final Mean (NS): 84 (8) | Final Mean (NS): 39 (12) |
| **Cambal, 2008**[**69**](#_ENREF_69) | Superficial Vein Surgery-vein stripping; compression: multi layer, 39 | Perforator-SEPS; compression: multi layer, 56 | rate wound recurrence (Not further specified) | NR | Pts with event (%): 12 (31) | Pts with event (%): 16 (29) |
| **Cambal, 2008**[**69**](#_ENREF_69) | Superficial Vein Surgery-vein stripping; compression: multi layer, 39 | Perforator-sclerotherapy; compression: multi layer, 698 | rate wound recurrence (Not further specified) | NR | Pts with event (%): 12 (31) | Pts with event (%): 126 (18) |
| **Cambal, 2008**[**69**](#_ENREF_69) | Superficial Vein Surgery-vein stripping; compression: multi layer, 39 | Perforator-SEPS; compression: multi layer, 56 | functional status (Inability to work in days) |  | Total time range : 56 to 84 days |  |
| **Cambal, 2008**[**69**](#_ENREF_69) | NA | Perforator-sclerotherapy; compression: multi layer, 698 | functional status (Inability to work in days) | NR | NA | 7 days |
| **El-Hafez, 2004**[**68**](#_ENREF_68) | Superficial Vein Surgery-vein stripping; compression: multi layer, hydrocolloid, 10 | Perforator-ligation; compression: multi layer, hydrocolloid, 26 | prop ulcers healed (Not further specified) | 12 months | Pts with event (%): 7 (70) | Pts with event (%): 22 (84.6) |
| **El-Hafez, 2004**[**68**](#_ENREF_68) | Superficial Vein Surgery-vein stripping; compression: multi layer, hydrocolloid | Perforator-ligation; compression: multi layer, hydrocolloid | functional status (Initial walking disturbances) | 12 months | Pts with event (%): 7 (70) | Pts with event (%): 5 (19.2) |
| **Harlander-Locke, 2011**[**74**](#_ENREF_74) | Superficial Vein Surgery-RFA Perforator-RFA, 72 | NA | mortality (Not further specified) | 12 months | pts with events (%): 2 (3)  Denominator: 72 Persons | NA |
| **Harlander-Locke, 2011**[**74**](#_ENREF_74) | Superficial Vein Surgery-RFA Perforator-RFA, 110 | NA | prop ulcers healed (Not further specified; Weekly photographs assessed by wound care software system) | 6 months | Total events: 76  Denominator: 110 ulcers | NA |
| **Harlander-Locke, 2011**[**74**](#_ENREF_74) | Superficial Vein Surgery-RFA Perforator-RFA, 60 | NA | rate wound recurrence (Weekly photographs assessed by wound care software system) | 12 months | pts with events (%): 4 (7)  Total events: 6  Denominator: 60 Persons | NA |
| **Harlander-Locke, 2011**[**74**](#_ENREF_74) | Superficial Vein Surgery-RFA Perforator-RFA,56 | NA | time to complete closure (days) | NA | Mean Final (SD): 142 days (14) | NA |
| **Harlander-Locke, 2011**[**74**](#_ENREF_74) | Superficial Vein Surgery-RFA Perforator-RFA, 110 | NA | prop ulcers healed (Not further specified; Weekly photographs assessed by wound care software system) | 12 months | pts with events (%): 60 (55)  Total events: 84  Denominator: 110 ulcers | NA |
| **Labas, 2009**[**76**](#_ENREF_76) | Other-valvuloplasty of the popliteal vein and reflux in GSV and SSV treated with compression sclerotherapy, 56 | NA | time to complete closure (days) | NR | Median Final (SE): 39 days (12) | NA |
| **Labas, 2009**[**76**](#_ENREF_76) | Other-valvuloplasty of the popliteal vein and reflux in GSV and SSV treated with compression sclerotherapy, 56 | NA | rate wound recurrence (Not further specified) | 60 months | pts with events (%): 10 (18)  Denominator: 56 Persons | NA |
| **Labas, 2009**[**76**](#_ENREF_76) | Other-valvuloplasty of the popliteal vein and reflux in GSV and SSV treated with compression sclerotherapy, 56 | NA | prop ulcers healed (Not further specified) | NR | pts with events (%): 53 (95)  Denominator: 56 Persons | NA |
| **Lane, 2003**[**77**](#_ENREF_77) | Obstructive Reflux-angioplasty stenting, 42 | NA | ulcers healed | 86 months | Total events: 21 | NA |
| **Lane, 2003**[**77**](#_ENREF_77) | Obstructive Reflux-angioplasty stenting, 21 | NA | wound healing rates yes intermediate to complete (Not further specified) | 86 months | Baseline Mean (out of n= 52): 12.6 cm2  Final Mean (out of n=21): 1.2 cm2  P: <0.01 (ref baseline) | NA |
| **Lawrence, 2011**[**14**](#_ENREF_14) | Perforator-RFA, | NA | time to complete closure (days) | NR | Final Mean: 138 days | NA |
| **Lawrence, 2011**[**14**](#_ENREF_14) | Perforator-RFA, | NA | rate wound recurrence (Not further specified) | 12.85 months | pts with events (%): (4)  Denominator: healed ulcers, number not specified | NA |
| **Lawrence, 2011**[**14**](#_ENREF_14) | Perforator-RFA, | NA | prop ulcers healed (Not further specified) | 12.85 months | pts with events (%): (90) | NA |
| **Masuda, 1994**[**72**](#_ENREF_72) | Superficial Vein Surgery-vein stripping, 51 | NA | prop ulcers healed (Clinical class 0 or 1; SVS/ISCV) | 120 months | pts with events (%): 31 (60) | NA |
| **Nash, 1991**[**73**](#_ENREF_73) | Superficial Vein Surgery-vein stripping; compression: 30-40 mm Hg, 42 | NR, 19 | rate wound recurrence (Not further specified) | 18 months | Total events: 1 | Total events: 3 |
| **Pang, 2010**[**70**](#_ENREF_70) | Perforator-sclerotherapy, 82 | NA | prop ulcers healed (complete re-epithelialisation of the leg for more than 2 weeks) |  | pts with events (%): 67 (82)  Denominator: 82 Persons | NA |
| **Pang, 2010**[**70**](#_ENREF_70) | Perforator-sclerotherapy, 82 | NA | time to complete closure (median duration in months) | NA | Median (IQR): 1 month (1 to 2) | NA |
| **Pang, 2010**[**70**](#_ENREF_70) | Perforator-sclerotherapy, 83 | NA | mortality (Not further specified) | NA | pts with events (%): 7 (8)  Denominator: 130 Persons | NA |
| **Sigala, 2007**[**78**](#_ENREF_78) | Perforator-SEPS, 62 | NA | prop ulcers healed (after 26 weeks (%)) | 26 weeks | pts with events (%): 32 (52) | NA |
| **Sigala, 2007**[**78**](#_ENREF_78) | Perforator-SEPS, 62 | NA | prop ulcers healed (after 1 a (%)) | 12 months | pts with events (%): 60 (97) | NA |
| **Sigala, 2007**[**78**](#_ENREF_78) | Perforator-SEPS, 62 | NA | prop ulcers healed (healing rate after 12 weeks (%)) | 12 weeks | pts with events (%): 18 (29) | NA |
| **Sottiurai, 1991**[**67**](#_ENREF_67) | Superficial Vein Surgery-vein stripping; compression: pump Unna boot elastic stocking or ace wrap, 16 | Superficial Vein Surgery-vein stripping Deep Vein Surgery-valvuloplasty; compression: pump Unna boot elastic stocking or ace wrap, 24 | functional status (Improvement in venous function status; Kressman's technique) | NR | Total events: 9  Denominator: 16 persons | Total events: 22  Denominator: 24 persons  P: <0.001 (ref Grp1) |
| **Sottiurai, 1991**[**67**](#_ENREF_67) | Superficial Vein Surgery-vein stripping; compression: pump Unna boot elastic stocking or ace wrap, 33 | Superficial Vein Surgery-vein stripping Deep Vein Surgery-valvuloplasty; compression: pump Unna boot elastic stocking or ace wrap, 46 | rate wound recurrence (Not further specified) | NR | Total events: 19  Denominator: 33 persons | Total events: 9  Denominator: 49 persons  P: <0.001 (ref Grp1) |
| **Taradaj, 2011**[**75**](#_ENREF_75) | Superficial Vein Surgery-vein stripping Perforator-ligation | NA | rate wound recurrence (any breakdown of epithelium between the knee and malleoli after ulcer healing) | 24 months | pts with events (%): (18.7) | NA |
| **Taradaj, 2011**[**75**](#_ENREF_75) | Superficial Vein Surgery-vein stripping Perforator-ligation, 35 | NA | prop ulcers healed (Complete re-epithelialization of the leg) | 7 weeks | pts with events (%): 19 (53.1) | NA |
| **Wolters, 1997**[**79**](#_ENREF_79) | Perforator-SEPS, 74 | NA | prop ulcers healed (healing rate after 3 months(%); Reporting standards in venous disease; classification according to Rutherford and acoustic doppler sonography) | 3 months | pts with events (%): 68 (92)  Denominator: NA | NA |
| **Wolters, 1997**[**79**](#_ENREF_79) | Perforator-SEPS, 74 | NA | prop ulcers healed (healing rate after 12 months(%); Reporting standards in venous disease: classification according to Rutherford & acoustic doppler sonography) | 12 months | pts with events (%): 57 (77)  Denominator: NA | NA |

Abbreviations: AWD = advanced wound dressings; CI = confidence interval; Grp1 = Group 1; Grp2 = Group 2; GSV = great saphenous vein; GSV = great saphenous vein; IQR = interquartile range; mm Hg = millimeters of mercury; NA = not applicable; NR = not reported; NS = not significant; P = P-value; prop = proportion; Pts = patients; RFA = radiofrequency ablation; RH = relative hazard; SD = standard deviation; SE = standard error; SEPS = subfascial endoscopic perforator surgery; SF – 36 = Short Form-36 Health Survey; SSV = short saphenous vein; surg = surgery; SVS/ISCV = Society for Vascular Surgery/International Society for Cardiovascular Surgery; unspec = unspecified