Appendix:

Per-protocol (PP) analysis

Table S1: Baseline characteristics of the teeth in both groups. SE selective, SW stepwise carious tissue removal. In the per-protocol analysis, drop-outs were excluded.

	SE (n = 54)	SW (n = 52)
Age (Years)		
Mean (SD)	30.4 (7.82)	29 (6)
Gender [n (%)]		
Male	20 (37.0%)	14 (26.9%)
Female	34 (63.0%)	38 (73.1%)
Arch [n (%)]		
Upper arch	28 (51.8%)	19 (36.5%)
Lower arch	26 (48.1%)	33 (63.5%)
Tooth type [n (%)]		
Premolars	24 (44.4%)	24 (46.2%)
Molars	30 (55.6%)	28 (53.8%)
Number of surfaces [n (%)]		
One-surface	15 (27.8%)	19 (36.5%)
Multi-surface	39 (72.2%)	33 (63.5%)

Table S2: One year results of the trial. SE selective, SW stepwise carious tissue removal (Per-protocol analysis). In the per-protocol analysis, drop-outs were excluded; hence, costs per tooth increases compared with the ITT analysis (as drop-outs will not have generated costs at T2 or during follow-up).

	SE (n = 54)	SW (n = 52)
Pulp exposures	0	5*
Endodontic treatment	6	6* (one after exposure)
Extraction	1	0
Total complications	7	10
Initial treatment costs in EGP(mean, [SD])	**475.1 [76.58]**	**535.02 [91.13]**
Total treatment costs in EGP (mean, [SD])	615.91 [398.19]	677.15 [374.51]
Total costs in EGP (mean, [SD])	946.38 [497.2]	999.17 [452.32]
Modified total costs in EGP (mean, [SD])	**868.31 [503.04]**	**988.88 [482.61]**

Bold: significant differences ($p<0.05$).

* 1 case showed endodontic complications after direct pulp capping

Failure rates after 12 months were 12.9% for SE vs. 19.2% for SW. Initial treatment costs were significantly higher for SW than SE, while for total costs there were no significant differences. Modified total costs were significantly higher in SW than SE.

Table S3: Factors associated with initial treatment costs, total treatment costs, total costs, modified total costs and risk of complications. The mean coefficient (units of scale) or the Hazard Ratio (HR) and 95% CI are shown. **Bold**: significant (p<0.05). (Per-protocol analysis; drop-outs were excluded).

Item	Initial treatment costs (EGP)	Total treatment costs (EGP)	Total costs (EGP)	Modified total costs (EGP)	Risk of complications (HR)
SW (ref: SE)	**0.13 (0.07/0.20)**	0.13 (-0.02/0.28)	0.09 (-0.44/0.23)	**0.17 (0.02/0.31)**	1.52 (0.55/4.14)
Age (years)	-0.002 (-0.007/0.004)	0.00 (-0.01/0.01)	0.005 (-0.007/0.01)	0.004 (-0.01/0.01)	0.99 (0.91/1.08)
Female sex (ref: male)	-0.03 (-0.01/0.042)	0.04 (-0.12/0.22)	-0.01 (-0.17/0.13)	-0.01 (-0.17/0.15)	1.83 (0.55/6.07)
Upper arch (ref: lower)	-0.06 (-0.13/0.01)	0.003 (-0.17/0.18)	-0.06 (-0.23/0.09)	-0.04 (-0.22/0.12)	1.06 (0.35/3.17)
Molar (ref: premolar)	-0.04 (-0.13/0.04)	**0.26 (0.04/0.47)**	0.17 (-0.02/0.36)	**0.21 (0.01/0.42)**	**3.68 (1.12/12.09)**
Multi-surface (ref: one-surface)	**0.1 (0.005/0.19)**	**0.4 (0.17/0.62)**	0.18 (-0.02/0.39)	**0.24 (0.03/0.46)**	**5.26 (1.29/21.38)**

Regression analysis showed molars and multi-surface restorations were more prone to complications than premolars and single surface restorations. While treatment strategy, age, gender and dental arch did not have a significant association (p>0.05). Initial treatment costs were significantly higher for SE than SW and for multi-surface restorations, while total treatment costs were only significantly for molars and multi-surface restorations. Modified total costs were significantly higher for SW than SE, and also for molars and multi-surface restorations.