

## Supplemental tables for AJIC

**Table 1 Summary of SDS elution analysis on dental straight (hand) instruments after short cycles**

<b>short cycle</b>			
<b>Detergent used</b>	<b>N of cycles</b>	<b>N (total) of straight instruments</b>	<b>µg/instrument residual protein median (range)</b>
High Alkaline	3	40	< 10
Neutral	3	30	< 10 (<10-13.7)
1% SDS	3	30	< 10
Enzymatic	3	45	< 10
Tap water	3	40	12.7 (<10-30.2)
RO water	3	45	20.2 (<10-69.6)

(RO water is the only condition, significantly higher than 10 µg/instrument after OPA analysis ( $p < 0.001$ )).

**Table 2 Summary of SDS elution analysis on extraction forceps after short cycles**

<b>Short cycle</b>			
<b>Detergent used</b>	<b>N of cycles</b>	<b>N (total) of forceps</b>	<b>µg/instrument residual protein median (range)</b>
High Alkaline	3	8	< 20
Neutral	3	6	<20 (<20-34.3)
1% SDS	3	6	< 20
Enzymatic	3	9	< 20
Tap water	3	8	< 20 (<20-58.1)
RO water	3	9	< 20 (<20-66.7)

(no cleaning combination is significantly higher than 20 µg/instrument)

**Table 3 Summary of SDS elution analysis on dental straight (hand) instruments after long cycles**

<b>Long cycles</b>			
<b>Detergent used</b>	<b>N of cycles</b>	<b>N (total) of straight instruments</b>	<b>µg/instrument residual protein median (range)</b>
High Alkaline	4	45	< 10 (<10-18.8)
Neutral	3	30	< 10
1% SDS	3	30	< 10
Enzymatic	3	45	< 10 (<10-13.5)
Tap water	4	55	< 10 (<10-18.8)
RO water	3	40	<10 (<10-48.2)

(No cleaning combination is significantly higher than 10 µg/instrument)

**Table 4 Summary of SDS elution analysis on dental extraction forceps after long cycles**

<b>Long cycles</b>			
<b>Detergent used</b>	<b>N of cycles</b>	<b>N (total) of forceps</b>	<b>µg/instrument residual protein median (range)</b>
High Alkaline	4	9	<20
Neutral	3	6	<20
1% SDS	3	6	<20
Enzymatic	3	9	<20
Tap water	4	11	<20
RO water	3	8	<20

(No cleaning combination is significantly higher than 20 µg/instrument)

**Table 5 Summary of on-instrument (G-Box) analysis on dental straight (hand) instruments after short cycles**

<b>Short cycles</b>			
<b>Detergent used</b>	<b>N of cycles</b>	<b>N (total) of straight instruments</b>	<b>µg/instrument residual protein median (range)</b>
High Alkaline	3	44	2.9 (0.0-805.4)
Neutral	3	30	31.8 (4.7-533.3)
1% SDS	3	30	27.1 (0.0-291.8)
Enzymatic	3	45	13.8 (0.2-270.2)
Tap water	3	40	1.7 (0.4-41.6)
RO water	5	50	28.7 (0.0-262.8)

(Neutral detergent, 1% SDS, RO water and enzymatic detergent demonstrated significantly higher levels of residual protein than the 5 µg/instrument cut-off value ( $p < 0.001$ ,  $0.012$ ,  $< 0.001$  and  $0.008$  respectively)).

**Table 6 Summary of on-instrument (G-Box) analysis on dental extraction forceps after short cycles**

<b>Short cycles</b>			
<b>Detergent used</b>	<b>N of cycles</b>	<b>N (total) of forceps</b>	<b>µg/instrument residual protein median (range)</b>
High Alkaline	3	9	2.8 (1.2-208.5)
Neutral	3	6	127.2 (4.4-377.3)
1% SDS	3	6	157.8 (30.9-793.1)
Enzymatic	3	9	3.4 (0.0-68.3)
Tap water	3	8	1.9 (0.4-24.7)
RO water	5	10	45.5 (4.1-178.8)

(neutral detergent, 1% SDS and RO water are significantly higher than 5 µg/instrument; p = 0.015, 0.029 and 0.015, respectively)

**Table 7 Summary of on-instrument (G-Box) analysis on dental straight (hand) instruments after long cycles**

<b>Long cycles</b>			
<b>Detergent used</b>	<b>N of cycles</b>	<b>N (total) of straight instruments</b>	<b>µg/instrument residual protein median (range)</b>
High Alkaline	3	30	84.1 (0.0-462.0)
Neutral	3	30	110.9 (11.6-512.0)
1% SDS	3	30	16.2 (0.0-249.0)
Enzymatic	3	45	21.4 (0.2-129.0)
Tap water	3	40	1.3 (0.7-79.3)
RO water	3	30	160.5 (29.7-733.8)

(high alkaline, neutral, enzymatic,, 1% SDS detergent and RO water showed significantly higher levels of residual protein than 5 µg/instrument (p < 0.001, < 0.001, 0.030, < 0.001 and < 0.001 respectively)

**Table 8 Summary of on-instrument (G-Box) analysis on dental extraction forceps after long cycles**

<b>P3 (intensive) cycle</b>			
<b>Detergent used</b>	<b>N of cycles</b>	<b>N (total) of forceps</b>	<b>µg/instrument residual protein median (range)</b>
High Alkaline	3	6	53.2 (0.0-185.3)
Neutral	3	6	190.1 (8.2-505.8)
1% SDS	3	6	67.9 (49.4-314.4)
Enzymatic	3	9	1.4 (0.0-26.4)
Tap water	3	8	1.6 (0.9-33.7)
RO water	3	6	578.8 (408.8-1582.3)

(high alkaline, neutral, 1% SDS detergent and RO water are significantly higher than the 5 µg/instrument cut-off (p = 0.041, 0.016, 0.011 and 0.002 respectively)

Supplemental tables

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