**Supplemental file**

**Utility of salivary cortisol and cortisone in the diagnostics of adrenal insufficiency**

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**Supplemental Table 1.** Median increase and 2.5th centile for the increase of sa-cortisol and sa-cortisone for healthy subjects not on oral estrogens

|  |  |
| --- | --- |
|  | 0-60 min |
| Increase sa-cortisol,  median (range) | 31,3 (30,0-33,1) |
| Increase sa-cortisone, medain (range) | 46,7 (43,3-49,4) |
| Increase sa-cortisol,  2.5th centile (90%CI) | 8,1 (2,9-12,8) |
| Increase sa-cortisone, 2.5th centile (90%CI) | 11,8 (-2,8-22,9) |

**Supplemental Table 2**. Gender diffenecens in sa-cortisol, and sa-cortisone level at baseline, 30 and 60 minutes after cosyntropin stimulation**.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Baseline | 30 min | 60 min |
| Sk-cortisol, p-value | 0.22 | 0.887 | 0.972 |
| Sk-cortisone, p-value | 0.364 | 0.473 | 0.813 |

**Supplemental Table 3.** Correlation between sa-cortisol and sa-cortisone, and kidney function (creatinine , eGFR), and BMI in healthy subjects not on oral estrogens.

|  |  |  |  |
| --- | --- | --- | --- |
| Correlation | Baseline | 30 min | 60 min |
| Sk-Cortisol/BMI,  Sparman rho (95%CI) | -0.22 (-0.40-(-0.03)) | -0.07 (-0.26-0.12) | -0.08 (-0.27-0.11) |
| Sk-Cortisol/eGFR  Sparman rho (95%CI) | 0.04 (-0.15-0.23) | 0.16 (-0.04-0.34) | -0.004 (-0.20-0.20) |
| Sk-Cortisone/BMI  Sparman rho (95%CI) | -0.23 (-0.41-(-0.04)) | -0.12 (-0.31-0.07) | 0.01 (-0.19-0.20) |
| Sk-Cortisone/eGFR  Sparman rho (95%CI) | 0.01 (-0.19-0.20) | 0.07 (-0.13-0.26) | -0.13 (-0.31-0.07) |

**Supplemental Table 4.** 2x2 tables illustrating diagnostic performance of sa- cortisol and sa-cortisone respectively.

Sa-cortisol 30 min. (cutoff 8.1 nmol/L) Sa- cortisol 60min. (cutoff 12.6 nmol/L)

|  |  |  |  |
| --- | --- | --- | --- |
|  | Disease | No disease | Total |
| Test + | 22 | 3 | 25 |
| Test - | 4 | 30 | 34 |
| Total | 26 | 33 | 59 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Disease | No disease | Total |
| Test + | 23 | 5 | 28 |
| Test - | 3 | 28 | 31 |
| Total | 26 | 33 | 59 |

Sa-cortisone 30 min. (cutoff 24.4 nmol/L) Sa-cortisone 60 min. (cutoff 32.4nmol/L)

|  |  |  |  |
| --- | --- | --- | --- |
|  | Disease | No disease | Total |
| Test + | 17 | 1 | 18 |
| Test - | 9 | 32 | 41 |
| Total | 26 | 33 | 59 |

|  |  |  |  |
| --- | --- | --- | --- |
|  | Disease | No disease | Total |
| Test + | 18 | 1 | 19 |
| Test - | 8 | 32 | 40 |
| Total | 26 | 33 | 59 |