**Supplemental table 1**

|  |  |
| --- | --- |
| Statistical level of agreement with Fleiss' Kappa Values | |
| Kappa value | Statistical level of agreement |
| <0 | Poor |
| 0.01-0.20 | Slight agreement |
| 0.21-0.40 | Fair agreement |
| 0.41-0.60 | Moderate agreement |
| 0.61-0.80 | Substantial agreement |
| 0.81-1.00 | Almost perfect agreement |

**Supplemental table 2** CT versus clinical examination, contingency tables.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Aslam [37] | Risk of bias | ++ | 4 x 4 Table | |  |  |
|  | Level of evidence | 2b |  | CE + | CE - | Total |
|  | Incidence CE | 18% | CT + | 3 | 0 | 3 |
|  | Incidence CT | 18% | CT - | 0 | 14 | 14 |
|  | Relative increase | 1.0 | Total | 3 | 14 | 17 |
|  |  |  |  |  |  |  |
| Canda [18] | Risk of bias | + | 4 x 4 Table | |  |  |
|  | Level of evidence | 2b |  | CE + | CE - | Total |
|  | Incidence CE | 22% | CT + | 15 | 4 | 19 |
|  | Incidence CT | 28% | CT - | 0 | 48 | 48 |
|  | Relative increase | 1.27 | Total | 15 | 52 | 67 |
|  |  |  |  |  |  |  |
| Cingi [19] | Risk of bias | + | 4 x 4 Table | |  |  |
|  | Level of evidence | 2b |  | CE + | CE - | Total |
|  | Incidence CE | 52% | CT + | 12 | 6 | 18 |
|  | Incidence CT | 86% | CT - | 0 | 3 | 3 |
|  | Relative increase | 1.5 | Total | 12 | 9 | 21 |
|  |  |  |  |  |  |  |
| Conde-Muino [20] | Risk of bias | ++++ | 4 x 4 Table | |  |  |
|  | Level of evidence | 2b |  | CE + | CE - | Total |
|  | Incidence CE | 3% | CT + | 1 | 1 | 2 |
|  | Incidence CT | 7% | CT - | 0 | 29 | 29 |
|  | Relative increase | 2.0 | Total | 1 | 30 | 31 |
|  |  |  |  |  |  |  |
| Etherington [33] | Risk of bias | +++ | 4 x 4 Table | |  |  |
|  | Level of evidence | 4 |  | CE + | CE - | Total |
|  | Incidence CE | 29% | CT + | 8 | 2 | 10 |
|  | Incidence CT | 36% | CT - | 0 | 18 | 18 |
|  | Relative increase | 1.25 | Total | 8 | 20 | 28 |
|  |  |  |  |  |  |  |
| Hauters [40] | Risk of bias | ++ | 4 x 4 Table | |  |  |
|  | Level of evidence | 2b |  | CE + | CE - | Total |
|  | Incidence CE | 3% | CT + | 1 | 1 | 2 |
|  | Incidence CT | 7% | CT - | 0 | 27 | 27 |
|  | Relative increase | 2.0 | Total | 1 | 28 | 29 |
|  |  |  |  |  |  |  |
| Hino [23] | Risk of bias | +++ | 4 x 4 Table | |  |  |
|  | Level of evidence | 2b |  | CE + | CE - | Total |
|  | Incidence CE | 20% | CT + | 16 | 10 | 26 |
|  | Incidence CT | 17% | CT - | 12 | 21 | 33 |
|  | Relative increase | 0.93 | Total | 28 | 31 | 59 |
|  |  |  |  |  |  |  |
| Hong [24] | Risk of bias | ++ | 4 x 4 Table | |  |  |
|  | Level of evidence | 2b |  | CE + | CE - | Total |
|  | Incidence CE | 27% | CT + | 29 | 7 | 36 |
|  | Incidence CT | 33% | CT - | 0 | 72 | 72 |
|  | Relative increase | 1.24 | Total | 29 | 79 | 108 |
|  |  |  |  |  |  |  |
| Köhler [38] | Risk of bias | - | 4 x 4 Table | |  |  |
|  | Level of evidence | 2b |  | CE + | CE - | Total |
|  | Incidence CE | 1% | CT + | 1 | 2 | 3 |
|  | Incidence CT | 4% | CT - | 0 | 48 | 48 |
|  | Relative increase | 3.0 | Total | 1 | 50 | 51 |
|  |  |  |  |  |  |  |
| Lambrecht [32] | Risk of bias | ++++ | 4 x 4 Table | |  |  |
|  | Level of evidence | 1b |  | CE + | CE - | Total |
|  | Incidence CE | 24% | CT + | 10 | 9 | 19 |
|  | Incidence CT | 33% | CT - | 4 | 35 | 39 |
|  | Relative increase | 1.36 | Total | 14 | 44 | 58 |
|  |  |  |  |  |  |  |
| Moreno-Matias [26] | Risk of bias | ++++ | 4 x 4 Table | |  |  |
|  | Level of evidence | 2b |  | CE + | CE - | Total |
|  | Incidence CE | 44% | CT + | 23 | 12 | 35 |
|  | Incidence CT | 47% | CT - | 10 | 30 | 40 |
|  | Relative increase | 1.06 | Total | 33 | 42 | 75 |
|  |  |  |  |  |  |  |
| Näsvall 2017 [39] | Risk of bias | - | 4 x 4 Table | |  |  |
|  | Level of evidence | 2b |  | CE + | CE - | Total |
|  | Incidence CE | 22% | CT + | 5 | 2 | 7 |
|  | Incidence CT | 15% | CT - | 6 | 34 | 40 |
|  | Relative increase | 0.64 | Total | 11 | 36 | 47 |
|  |  |  |  |  |  |  |
| Seo [28] | Risk of bias | ++ | 4 x 4 Table | |  |  |
|  | Level of evidence | 2b |  | CE + | CE - | Total |
|  | Incidence CE | 24% | CT + | 20 | 4 | 24 |
|  | Incidence CT | 29% | CT - | 0 | 59 | 59 |
|  | Relative increase | 1.2 | Total | 20 | 63 | 83 |
|  |  |  |  |  |  |  |
| Serra-Aracil [42] | Risk of bias | +++ | 4 x 4 Table | |  |  |
|  | Level of evidence | 1b |  | CE + | CE - | Total |
|  | Incidence CE | 28% | CT + | 15 | 3 | 18 |
|  | Incidence CT | 33% | CT - | 0 | 36 | 36 |
|  | Relative increase | 1.2 | Total | 15 | 39 | 54 |
|  |  |  |  |  |  |  |
| Veirimaa [2] | Risk of bias | +++ | 4 x 4 Table | |  |  |
|  | Level of evidence | 1b |  | CE + | CE - | Total |
|  | Incidence CE | 25% | CT + | 17 | 16 | 33 |
|  | Incidence CT | 49% | CT - | 0 | 34 | 34 |
|  | Relative increase | 1.94 | Total | 17 | 50 | 67 |
|  |  |  |  |  |  |  |
| Fleshmana [34] | Risk of bias | - |  |  |  |  |
|  | Level of evidence | 1b |  |  |  |  |
|  | Incidence CE | 13% |  |  |  |  |
|  | Incidence CT | 11% |  |  |  |  |
|  |  |  |  |  |  |  |
| Ihnát [43] | Risk of bias | +++ |  |  |  |  |
|  | Level of evidence | 2b |  |  |  |  |
|  | Incidence CE | 48% |  |  |  |  |
|  | Incidence CT | 53% |  |  |  |  |
|  |  |  |  |  |  |  |
| Nikberg [27] | Risk of bias | - |  |  |  |  |
|  | Level of evidence | 2b |  |  |  |  |
|  | Incidence CE | 25% |  |  |  |  |
|  | Incidence CT | 53% | 141 CT of 187 patients | | | |
|  |  |  |  |  |  |  |
| Odensten [41] | Risk of bias | ++ |  |  |  |  |
|  | Level of evidence | 1b |  |  |  |  |
|  | Incidence CE | 29% |  |  |  |  |
|  | Incidence CT | 35% | 198 CT of 211 patients | | | |
|  |  |  |  |  |  |  |
| Timmermans [31] | Risk of bias | - |  |  |  |  |
|  | Level of evidence | 2b |  |  |  |  |
|  | Incidence CE | 53% |  |  |  |  |
|  | Incidence CT | 53% | 87 CT of 150 patients | | | |

CE, clinical examination; CT, computed tomography scan.

a CT if there was clinical suspicion that a hernia was present.

**Supplemental table 3** Ultrasonography versus clinical examination, contingency table.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Sjödahl [29] | Risk of bias | ++++ | 4 x 4 Table | |  |  |
|  | Level of evidence | 2b |  | CE + | CE - | Total |
|  | Incidence CE | 61% | US + | 9 | 6 | 15 |
|  | Incidence US | 35% | US - | 17 | 11 | 28 |
|  | Relative increase | 0.58 | Total | 26 | 17 | 43a |

CE, clinical examination; US, ultrasonography.

a All patients with peristomal bulging.

**Supplemental table 4** CT versus ultrasonography.

|  |  |  |
| --- | --- | --- |
| Näsvall 2014 [36] | Risk of bias | ++ |
|  | Level of evidence | 2b |
|  | Incidence CT | 80% |
|  | Incidence 3D US | 75% |
|  | Relative increase | ~ |

CT, computed tomography scan; US, ultrasonography.

**Supplemental table 5** Peroperative diagnosis, contingency tables.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Näsvall 2014 [36] | Risk of bias | ++++ | 4 x 4 Table | |  |  |
|  | Level of evidence | 2b |  | CT + | CT - | Total |
|  | Incidence CT | 80% | Surgery + | 15 | 3 | 18 |
|  | Incidence surgery | 90% | Surgery - | 1 | 1 | 2 |
|  |  |  | Total | 16 | 4 | 20 |
|  |  |  |  |  |  |  |
| Näsvall 2014 [36] | Risk of bias | ++++ | 4 x 4 Table | |  |  |
|  | Level of evidence | 2b |  | 3D US + | 3D US - | Total |
|  | Incidence 3D US | 75% | Surgery + | 15 | 3 | 18 |
|  | Incidence surgery | 90% | Surgery - | 0 | 2 | 2 |
|  |  |  | Total | 15 | 5 | 20 |
|  |  |  |  |  |  |  |
| Fleshman [34] | Risk of bias | - |  |  |  |  |
|  | Level of evidence | 1b |  |  |  |  |
|  | Incidence CE | 13% |  |  |  |  |
|  | Incidence CT | 11% |  |  |  |  |
|  | Incidence surgery | 13% |  |  |  |  |

CT, computed tomography scan; US, ultrasonography.

**Supplemental table 6** Imaging versus clinical examination, contingency tables.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Donahuea [21] | Risk of bias | + | 4 x 4 Table | |  |  |
|  | Level of evidence | 2b |  | CE + | CE- | Total |
|  | Incidence CE | 24% | Imaging + | 93 | 44 | 137 |
|  | Incidence imaging | 36% | Imaging - | 0 | 249 | 249 |
|  | Relative increase | 1.47 | Total | 93 | 293 | 386 |
|  |  |  |  |  |  |  |
| Hansson [11] | Risk of bias | + |  |  |  |  |
|  | Level of evidence | 2b |  |  |  |  |
|  | Incidence CE | 5% |  |  |  |  |
|  | Incidence imaging | 7% | Imaging: CT or MRI when in doubt | | | |
|  |  |  | 27 patients had a CT or MRI | | |  |

CE, clinical examination; CT, computed tomography scan; MRI, magnetic resonance imaging.

a Imaging = CT or MRI.