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| --- | --- | --- | --- | --- | --- |
| **Author and year** | **Study design** | **Study location** | **Number of patients with craniosynostosis**  | **Mean age in years (range)** | **Quality assessment\*** |
| Dagi 201427 | Retrospective chart review | Boston, MA, USA | 54 | 10.6 (2.4-33.8) | Poor |
| Driessen 201428 | Prospective cohort study | Rotterdam, The Netherlands | 38 | 6.2 (3.0-11.0) | Poor |
| Swanson 201726 | Cross-sectional study | Philadelphia, PA, USA | 40 | 2.9 (0.3-15.0) | Fair |

**Table S1: Main characteristics of included studies. \***Quality assessment performed using the National Institutes of Health (NIH) Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies.23

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Author and year** | **Primary outcome measures** | **Gold standard** | **Sensitivity (95% CI)** | **Specificity (95% CI)** |
| Dagi 201427 | Peripapillary RNFL thickness (n=54) | Fundus examination | 77 (50-92) | 83 (69-91) |
| Driessen 201428 | Total retinal thickness (n=109 eyes) | Fundus examination | Not performed | Not performed |
| Swanson 201726 | Maximal RNFL thickness (n=40) | Intra-operative ICP | 79 (57-91) | 81 (60-92) |
| Maximal retinal thickness (n=40) | Intra-operative ICP | 63 (41-81) | 86 (65-95) |
| Maximal anterior retinal projection (n=40) | Intra-operative ICP | 84 (62-94) | 67(45-83) |
| Combination of maximal RNFL thickness and maximal anterior retinal projection (n=40) | Intra-operative ICP | 89 (69-97) | 62 (41-79) |

**Table S2: Primary outcome measures of included studies.** *Sensitivity and specificity expressed as percent (%). Key: OCT = optical coherence tomography; RNFL = retinal nerve fibre layer; n = number of patients; ICP = intracranial pressure; CI = confidence intervals.*

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| --- | --- | --- | --- | --- |
| **Author and year** | **Secondary outcome measures** | **Gold standard** | **Sensitivity (95% CI)**  | **Specificity (95% CI)** |
| Dagi 201427 | Historical evidence of raised ICP (n=48) | Fundus examination | 85 (58-96) | 46 (30-62) |
| Visual field testing (n=36) | Fundus examination | 60 (32-83) | 81 (62-91) |
| Visual acuity (n=54) | Fundus examination | 15 (4-42) | 95 (84-99) |
| Driessen 201428 | Clinical history suggestive of raised ICP (n=38) | Fundus examination | Not performed | Not performed |
| Swanson 201726 | Fundus examination (n=40) | Intra-operative ICP | 11 (3-31) | 100 (85-100) |
| CT thumb printing (n=40) | Intra-operative ICP | 42 (23-64) | 86 (65-95) |
| CT ventricle effacement (n=40) | Intra-operative ICP | 11 (3-31) | 90 (71-97) |
| Complaints of headache (n=24) | Intra-operative ICP | 33 (15-58) | 78(45-94) |
| Any of clinical signs (n=40) | Intra-operative ICP | 47 (27-68) | 71 (50-86) |

**Table S3: Secondary outcome measures of included studies.** *Sensitivity and specificity expressed as percent (%). Key: n = number of patients; ICP = intracranial pressure; CI = confidence intervals.*