

The corneal subbasal nerve plexus and thickness of the retinal layers in pediatric type 1 diabetes and matched controls

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This article contains additional online-only material. The following should appear online-only: Tables S1 to S2

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Supplement:

Table 1: Anthropometric and clinical characteristics of patients with respect to the mode of insulin therapy.

Results are given as mean \pm standard deviation and median (min, max) for patients using MDII and CSI, respectively.

Table 2: Results of the OCT in pediatric T1DM patients and healthy controls.

Total retinal thickness as well as the thickness per retinal layer at the fovea together with the averaged thickness of the pericentral and peripheral areas are given as median and range.

| | CSII (5f / 7m) | MDI (6f / 10m) | p |
|---------------------------------------|------------------------|------------------------|-------|
| Age [year] | 13.2 (8.6 - 18.4) | 15.0 (10.5 - 17.8) | 0.302 |
| Absolute height [cm] | 164 (128 - 184) | 165 (139 - 184) | 0.982 |
| Standardized height [SDS] | 0.45 (-0.83 - 2.16) | 0.20 (-1.59 - 0.96) | 0.037 |
| Absolute weight [kg] | 53.8 (28.3 - 79.8) | 55.7 (33.2 - 83.0) | 0.664 |
| Standardized weight [SDS] | 0.27 (-0.94 - 2.00) | 0.07 (-1.38 - 2.27) | 0.397 |
| Absolute BMI [kg/m ²] | 19.7 (15.7 - 27.9) | 20.9 (17.2 - 28.4) | 0.423 |
| Standardized BMI [SDS] | 0.00 (-1.65 - 1.94) | 0.30 (-1.63 - 2.07) | 0.599 |
| Absolute BP _{sys} [mmHg] | 137 (105 - 148) | 129 (113 - 166) | 0.581 |
| Standardized BP _{sys} [SDS] | 2.40 (-0.49 - 3.56) | 1.59 (0.58 - 4.44) | 0.548 |
| Absolute BP _{dias} [mmHg] | 77 (64 - 94) | 71 (57 - 86) | 0.083 |
| Standardized BP _{dias} [SDS] | 1.21 (0.05 - 2.49) | 0.70 (-0.87 - 1.76) | 0.075 |
| Duration of disease [years] | 5.96 (1.2 - 13.1) | 2.75 (1.2 - 15.5) | 0.121 |
| Mean daily insulin dosage [IU/kg] | 0.30 (0.19 - 0.78) | 0.37 (0.20 - 0.66) | 0.324 |
| Actual HbA1c [%] | 8.45 (6.9 - 9.9) | 9.2 (4.6 - 14.8) | 0.568 |
| Mean HbA1c [%] | 8.1 (6.8 - 11.3) | 8.5 (6.7 - 12.7) | 1 |

Götze, von Keyserlingk et al, Supplemental Table 1

| | Thickness [μm] | Patients | Controls | p |
|------|-----------------------------|-----------------------|-----------------------|-------|
| ALL | fovea | 276.2 (232.0 - 327.3) | 286.0 (244.0 - 319.0) | 0.275 |
| | pericentral | 344.8 (302.9 - 368.7) | 348.2 (320.3 - 385.0) | 0.045 |
| | peripheral | 308.2 (283.2 - 336.8) | 311.1 (282.6 - 334.9) | 0.189 |
| RNFL | fovea | 15.67 (11.00 - 23.67) | 15.33 (10.67 - 18.33) | 0.786 |
| | pericentral | 23.79 (21.25 - 27.67) | 25.38 (21.83 - 29.08) | 0.022 |
| | peripheral | 37.17 (30.75 - 42.33) | 39.42 (32.92 - 44.67) | 0.066 |
| GCL | fovea | 17.83 (10.00 - 42.67) | 18.33 (11.00 - 28.00) | 0.506 |
| | pericentral | 51.78 (44.25 - 60.50) | 53.46 (49.50 - 60.50) | 0.039 |
| | peripheral | 37.63 (32.67 - 43.75) | 38.04 (32.67 - 44.58) | 0.582 |
| IPL | fovea | 22.83 (17.67 - 38.33) | 23.00 (17.33 - 28.67) | 0.961 |
| | pericentral | 42.13 (36.42 - 48.33) | 43.46 (39.50 - 46.25) | 0.137 |
| | peripheral | 30.63 (26.00 - 36.25) | 31.58 (26.33 - 35.75) | 0.571 |
| INL | fovea | 19.50 (12.67 - 32.67) | 18.17 (12.33 - 30.00) | 0.285 |
| | pericentral | 41.29 (32.17 - 45.08) | 40.79 (35.92 - 46.58) | 0.850 |
| | peripheral | 34.92 (31.50 - 39.58) | 34.83 (31.75 - 40.33) | 0.749 |
| OPL | fovea | 26.67 (16.33 - 36.33) | 29.17 (18.67 - 38.00) | 0.445 |
| | pericentral | 33.29 (28.42 - 40.50) | 33.25 (27.08 - 41.25) | 0.935 |
| | peripheral | 27.42 (24.42 - 31.50) | 27.25 (25.08 - 31.17) | 0.730 |
| ONL | fovea | 86.67 (66.67 - 104.0) | 89.67 (47.33 - 108.3) | 0.133 |
| | pericentral | 67.38 854.67 - 89.50) | 71.29 (45.67 - 84.25) | 0.215 |
| | peripheral | 59.79 (47.42 - 76.67) | 61.17 (40.42 - 70.25) | 0.341 |
| RPE | fovea | 17.33 (12.67 - 20.33) | 17.67 (14.67 - 22.33) | 0.273 |
| | pericentral | 14.38 (11.83 - 16.25) | 14.79 (13.08 - 16.83) | 0.349 |
| | peripheral | 13.17 (11.25 - 15.33) | 13.38 (11.08 - 15.50) | 0.967 |
| PR | fovea | 90.83 (80.67 - 96.33) | 92.67 (83.00 - 98.67) | 0.505 |
| | pericentral | 82.38 (71.83 - 86.17) | 83.08 (78.58 - 87.00) | 0.139 |
| | peripheral | 79.75 (74.75 - 81.92) | 80.21 (74.58 - 83.50) | 0.285 |