**Appendix A. SLEEP DISTURBANCES SCALE FOR CHILDREN**

***INSTRUCTIONS****: Thisquestionnairewillallowyourdoctor to have a betterunderstanding of the sleep-wakerhythm of yourchild and of anyproblems in his/hersleepbehaviour. Answereveryquestion; in answering, considereachquestionaspertaining to the****past 6 months*** *of the child’s life. Pleaseanswer the questions by circling or striking the number 1 to 5.* Thankyouverymuch for your help.

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Age:\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 1. How many hours of sleepdoesyourchildget on mostnights. | 1  *9-11 hours* | 2  *8-9 hours* | 3  *7-8 hours* | 4  *5-7 hours* | 5  *lessthan 5 hours* |
| 1. How long aftergoing to bed doesyourchildusuallyfallasleep | 1  *lessthan 15'* | 2  *15-30'* | 3  *30-45'* | 4  *45-60'* | 5  *more than 60'* |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 5 **Always (daily)** | | | | | |
| 4 **Often (3 or 5 times per week)** | | | | |  |
| 3 **Sometimes (once or twice per week)** | | | |  |  |
| 2 **Occasionally (once or twice per month or less)** | | |  |  |  |
| 1 **Never** | |  |  |  |  |
| 1. The childgoes to bed reluctantly | 1 | 2 | 3 | 4 | 5 |
| 1. The childhasdifficultygetting to sleepat night | 1 | 2 | 3 | 4 | 5 |
| 1. The childfeelsanxious or afraidwhenfallingasleep | 1 | 2 | 3 | 4 | 5 |
| 1. The childstartles or jerksparts of the body whilefallingasleep | 1 | 2 | 3 | 4 | 5 |
| 1. The child shows repetitiveactionssuchasrocking or head bangingwhilefallingasleep | 1 | 2 | 3 | 4 | 5 |
| 1. The childexperiencesvividdream-likesceneswhilefallingasleep | 1 | 2 | 3 | 4 | 5 |
| 1. The childsweatsexcessivelywhilefallingasleep | 1 | 2 | 3 | 4 | 5 |
| 1. The childwakes up more thantwice per night | 1 | 2 | 3 | 4 | 5 |
| 1. Afterwaking up in the night, the childhasdifficulty to fallasleepagain | 1 | 2 | 3 | 4 | 5 |
| 1. The childhasfrequenttwitching or jerking of legswhileasleep or oftenchanges position during the night or kicks the covers off the bed. | 1 | 2 | 3 | 4 | 5 |
| 1. The childhasdifficulty in breathingduring the night | 1 | 2 | 3 | 4 | 5 |
| 1. The childgasps for breath or isunable to breatheduringsleep | 1 | 2 | 3 | 4 | 5 |
| 1. The childsnores | 1 | 2 | 3 | 4 | 5 |
| 1. The childsweatsexcessivelyduring the night | 1 | 2 | 3 | 4 | 5 |
| 1. Youhaveobserved the childsleepwalking | 1 | 2 | 3 | 4 | 5 |
| 1. Youhaveobserved the childtalking in his/hersleep | 1 | 2 | 3 | 4 | 5 |
| 1. The childgrindsteethduringsleep | 1 | 2 | 3 | 4 | 5 |
| 1. The childwakes from sleepscreaming or confused so thatyoucannotseem to getthrough to him/her, buthas no memory of theseevents the nextmorning | 1 | 2 | 3 | 4 | 5 |
| 1. The childhasnightmareswhich he/shedoesn’tremember the nextday | 1 | 2 | 3 | 4 | 5 |
| 1. The childisunusuallydifficult to wake up in the morning | 1 | 2 | 3 | 4 | 5 |
| 1. The childawakes in the morning feeling tired | 1 | 2 | 3 | 4 | 5 |
| 1. The childfeelsunable to movewhenwaking up in the morning | 1 | 2 | 3 | 4 | 5 |
| 1. The childexperiences daytime sleepiness | 1 | 2 | 3 | 4 | 5 |
| 1. The childfallsasleepsuddenly in inappropriate situations | 1 | 2 | 3 | 4 | 5 |
| Disorders of initiating and maintainingsleep (sum the score of the items 1,2,3,4,5,10,11) |  | | | | |
| SleepBreathingDisorders (sum the score of the items 13,14,15) |  | | | | |
| Disorders of arousal (sum the score of the items 17,20,21) |  | | | | |
| Sleep-Wake TransitionDisorders (sum the score of the items 6,7,8,12,18,19) |  | | | | |
| Disorders of excessivesomnolence (sum the score of the items 22,23,24,25,26) |  | | | | |
| SleepHyperhydrosis (sum the score of the items 9,16) |  | | | | |
| Total score (sum 6 factors’ scores) |  | | | | |

Appendix B. SDSC ScoringSheet

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Age:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | TOTAL | DIMS | SBD | DA | SWTD | DOES | SHY |  |
| T |  |  |  |  |  |  |  | T |
| 100+ | 74+ | 26+ | 11+ | 8+ | 21+ | 20+ |  | 100+ |
| 99 | 73 | 25 |  |  | 20 |  |  | 99 |
| 98 | 72 |  |  |  |  |  |  | 98 |
| 97 | 71 |  |  |  |  |  |  | 97 |
| 96 |  |  |  |  |  | 19 |  | 96 |
| 95 | 70 | 24 |  |  | 19 |  |  | 95 |
| 94 | 69 |  |  | 7 |  |  |  | 94 |
| 93 | 68 |  | 10 |  |  |  |  | 93 |
| 92 |  | 23 |  |  |  | 18 | 10 | 92 |
| 91 | 67 |  |  |  | 18 |  |  | 91 |
| 90 | 66 |  |  |  |  |  |  | 90 |
| 89 | 65 | 22 |  |  |  |  |  | 89 |
| 88 | 64 |  |  |  |  | 17 |  | 88 |
| 87 |  |  |  |  | 17 |  |  | 87 |
| 86 | 63 | 21 | 9 |  |  |  | 9 | 86 |
| 85 | 62 |  |  |  |  | 16 |  | 85 |
| 84 | 61 |  |  |  |  |  |  | 84 |
| 83 |  |  |  |  | 16 |  |  | 83 |
| 82 | 60 | 20 |  | 6 |  |  |  | 82 |
| 81 | 59 |  |  |  |  | 15 |  | 81 |
| 80 | 58 |  |  |  |  |  | 8 | 80 |
| 79 | 57 | 19 | 8 |  | 15 |  |  | 79 |
| 78 |  |  |  |  |  |  |  | 78 |
| 77 | 56 |  |  |  |  | 14 |  | 77 |
| 76 | 55 | 18 |  |  |  |  |  | 76 |
| 75 | 54 |  |  |  |  |  |  | 75 |
| 74 |  |  |  |  | 14 |  | 7 | 74 |
| 73 | 53 | 17 |  |  |  | 13 |  | 73 |
| 72 | 52 |  | 7 |  |  |  |  | 72 |
| 71 | 51 |  |  |  |  |  |  | 71 |
| 70 |  | 16 |  | 5 | 13 |  |  | 70 |
| 69 | 50 |  |  |  |  | 12 | 6 | 69 |
| 68 | 49 |  |  |  |  |  |  | 68 |
| 67 | 48 |  |  |  |  |  |  | 67 |
| 66 | 47 | 15 |  |  | 12 |  |  | 66 |
| 65 |  |  | 6 |  |  | 11 |  | 65 |
| 64 | 46 |  |  |  |  |  |  | 64 |
| 63 | 45 | 14 |  |  |  |  | 5 | 63 |
| 62 | 44 |  |  |  | 11 |  |  | 62 |
| 61 |  |  |  |  |  | 10 |  | 61 |
| 60 | 43 | 13 |  |  |  |  |  | 60 |
| 59 | 42 |  |  |  |  |  |  | 59 |
| 58 | 41 |  | 5 | 4 | 10 |  |  | 58 |
| 57 |  | 12 |  |  |  | 9 | 4 | 57 |
| 56 | 40 |  |  |  |  |  |  | 56 |
| 55 | 39 |  |  |  |  |  |  | 55 |
| 54 | 38 | 11 |  |  | 9 |  |  | 54 |
| 53 | 37 |  |  |  |  | 8 |  | 53 |
| 52 |  |  | 4 |  |  |  |  | 52 |
| 51 | 36 |  |  |  |  |  | 3 | 51 |
| 50 | 35 | 10 |  |  | 8 | 7 |  | 50 |
| 49 | 34 |  |  |  |  |  |  | 49 |
| 48 |  |  |  |  |  |  |  | 48 |
| 47 | 33 | 9 |  | 3 |  |  |  | 47 |
| 46 | 32 |  |  |  |  | 6 |  | 46 |
| 45 | 31 |  | 3 |  | 7 |  | 2 | 45 |
| 44 |  | 8 |  |  |  |  |  | 44 |
| 43 | 30 |  |  |  |  |  |  | 43 |
| 42 | 29 |  |  |  |  | 5 |  | 42 |
| 41 | 28 | 7 |  |  | 6 |  |  | 41 |
| 40 | 27 |  |  |  |  |  |  | 40 |
| 39 |  |  |  |  |  |  | 1 | 39 |
| 38 | 26 |  | 2 |  |  | 4 |  | 38 |
| 37 |  |  |  |  | 5 |  |  | 37 |
| 36 |  |  |  |  |  |  |  | 36 |
| 35 |  |  |  | 2 |  |  |  | 35 |
| 34 |  |  |  |  |  |  |  | 34 |

With the Bruni it will yield T scores for different classes of sleep disorder including sleep breathing disorders.  If you add up the scores on the front you get a total score too which also has it’s own T score.  You then refer to the back of the sheet and we generally say if any individual score or the total score yields a T score of 80 or above this means the children should be referred as there is an 80% chance they have a clinically significant problem.  This questionnaire is well validated and widely used in research  The reference is: Bruni O, Ottaviano S, Guidetti V, Romoli M, Innocenzi M, Cortesi F, Giannotti F:  The sleep disturbance scale for children (SDSC). Construction and validation of an instrument to evaluate sleep disturbances in childhood and adolescence.  Journal of Sleep Research 1996; 5:251-261

T score above 80: indicates referral to sleep specialist indicated.  If you draw a line across the scores between the 80’s in the first and last columns it gives you a rough cutoff point.  The researchers put their line above a T score of 70 however this is considered clinically too low a threshold for referral.