

Avi Sadeh 博士等の 米国 A.M.I 社製インファント専用ソフトの解説

Active Sleep とはふるまい (行動) から観察されたものです。それ故、アクティグラフは体の動きと睡眠の区別が出来ます。

新生児の眠りについて4種の状態を下記の通りご説明致します。

Active Sleep

新生児の目は閉じ、肋骨のあたりで不規則に呼吸しており、間欠的にレム睡眠が生じます。笑ったりピクピク筋肉が動いたり見たり、激しく声を上げたりと関連した動きが *Active Sleep* 時と観察出来ます。

Quiet Sleep

新生児の目は閉じ、腹部でゆっくり規則的に呼吸をします。時折驚いたり動いたり口をモゴモゴしたり短期間の手足や体の痙攣をする状態が観察出来ます。

Wake

新生児の目は開いています。体の動きは徐々に増し、所々に泣いたり叫んだり、うとうと眠る様な動きも観測出来ます。

Sleep-Wake

新生児は短い睡眠と覚醒の時間帯が交互に出現します。

別紙 Avi Sadeh 博士の論文を参照下さい。
睡眠コードで"2"が浅睡眠を示します。

Dear Mr. Gotoh,

"Active" sleep is analogous to REM sleep in non-infants. I am attaching the validation article by Avi Sadeh for this algorithm. It is something which can be observed behaviorally and that is why the actigraph can make the distinction between active and quiet sleep. I am including the explanation from this article below.

Please let me know if I can be of any further assistance.

Active Sleep: The infant's eyes are closed, respiration is uneven and primarily costal in nature. Rapid eye movements (REMs) occur intermittently. Smiles, frowns, sucking, sighs, sobs, twitching, vocalizations, and related behaviors may be seen during active sleep;

Quiet Sleep: The infant's eyes are closed, respiration is slow, regular, and primarily abdominal in nature. Motor activities such as occasional startles, rhythmic mouthing, and sighs are typical as well as short periods of tonic limb or body movement.

Wake: Infant's eyes are usually open. Activity level is generally increased. Fussing or crying may be observed, and alert or drowsy arousal may characterize the infant.

Sleep-Wake Transition: The infant is alternating between behaviors characterizing both wakefulness and sleep. There is usually generalized motor activity. Eyes may be closed or rapidly alternate between open and closed position.

Uncertain: State could not be determined accurately. For example, respiration data were missing or mother's interactive behavior interfered with the ability of the observer to monitor the infant.

Ambulatory Monitoring, Inc.