Actigraphy

What is an Actigraph?
An actigraph is a wristwatch-like device that records the wearer’s movements. It is usually worn for a minimum of seven days. The Actigraph is applied at the sleep center then the patient is sent home. The Actigraph is then returned to the sleep lab one week later for analysis and interpretation.

Who is a candidate for Actigraphy?
Actigraphy is used as an adjunct to in-lab Polysomnography to aid the clinician with the diagnosis and treatment of sleep disorders. It is especially helpful in patients who experience sleep onset insomnia or sleep maintenance insomnia.

How does Actigraphy work?
The actigraph is a watch-like device with an accelerometer inside. It may also have a light sensor and a marker event button. The accelerometer records movement that will indicate when someone is active and quiet. The light sensor records when lights are turned on and off. The event marker allows the patient to mark time with a button push that may indicate when they went to bed or they got up in the morning. It should be worn for 24-hours regardless of the activity. It is waterproof and can be worn in the shower, hot tub or when washing dishes. Actigraphy identifies sleep onset after a period of continuous inactivity that rarely occurs while people are awake. Actigraphy can be used to evaluate sleep variability while people sleep in their own bed over as many nights as desired.

The data is collected while the patient continues their regular daily and nighttime activities. This will occur for a minimum of seven days. Once the data is collected, the Actigraph is downloaded to a computer through a reader station. A trend is then printed so the clinician can review the activity on a single page.

All in all, actigraphy has, and continues to make, specific contributions to sleep research and clinical practice. Many medical disorders disrupt sleep. Assessing sleep disruption and monitoring sleep improvement during hospitalization is a positive contribution that wrist actigraphy can make.

Above is a sample of the trend data that is printed for the clinician. Note that the activity starts and stops at roughly the same time every day. This is an example of good sleep hygiene.

Use the Sleep Diary on the reverse side to track your sleep habits. Take the completed Sleep Diary to your physician and/or your Ohio Sleep physician to discuss your sleep habits and potential sleep disorders.
NAME: ____________________________________________

MONTH/YEAR: ______________________________________

Put down arrows (↓) at the times you went to bed and up arrows (↑) at the times you got out of bed.
Draw a line through the times you thought you were asleep.

<table>
<thead>
<tr>
<th>Date</th>
<th>Day of week (M,T,W,Th,F,S,Su)</th>
<th>Sleeping pill, alcohol or any sleeping aids</th>
<th>Caffeine pm</th>
<th>Mid-night am</th>
<th>noon</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>6 7 8 9 10 11 12</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td>12 1 2 3 4 5 6 7 8 9 10 11</td>
</tr>
</tbody>
</table>

Example: M  Ambien  coffee  ↓ → → → ↑  ↓ → ↑