



SleepImage Report

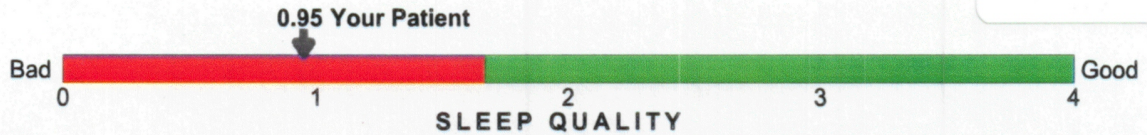
ADULT

Scott Theirl
 6793 N. Green Bay Rd.
 Glendale, Wisconsin 53209

Name: [Redacted]
 Patient Id: [Redacted]
 Address: [Redacted]
 Phone: [Redacted]
 Email: [Redacted]

DOB: [Redacted]
 Age: 46 years
 Gender: Female
 Weight: [Redacted]
 BMI: [Redacted]
 Epworth: [Redacted]
 STOP-Bang: [Redacted]

Total Recording Time: 9h:36m
 Study date: Jun 25, 2012
 Analysis date: [Redacted]
 Report date: [Redacted]



Cardio Pulmonary Coupling (CPC) Statistics

Variables	Duration (min)	Percent (%)	Expected Adult (%)
High Frequency Coupling (HFC) <i>Stable Sleep</i>	224.00	41.02	>50
Low Frequency Coupling (LFC) <i>Unstable Sleep</i>	234.67	42.97	<30
Very Low Frequency Coupling (VLFC) <i>REM or Awake</i>	81.07	14.84	<20
Other Frequency	6.40	1.17	<5
Elevated Low Frequency Coupling Broad Band (e-LFC bb)	125.87	23.05	<15
Elevated Low Frequency Coupling Narrow Band (e-LFC nb)	0.00	0.00	0
Total e-LFC	125.87	23.05	

Variables	Result	Expected Adult
LFC:HFC Ratio	1.05	<0.60
HFC:LFC Ratio	0.95	>1.67

Snoring Statistics

Variables	Duration (min)	Percent Of Sleep Period (%)	Number Of Events
Snoring	1.11	0.25	52
Supine	0.07	0.01	3
Non Supine	1.05	0.24	49



Actigraphy Statistics

Variables	Results ¹
Start Recording Time	Jun 25, 2012 21:29:56
End Recording Time	Jun 26, 2012 07:06:27
Analysis Start Time	21:33:08
Analysis End Time	06:39:16
Sleep Onset ² (min)	0.00
Total Sleep Time (min)	439.59
Total Wake Time (min)	89.48
Intermittent Wakefulness (#)	113
Duration of intermittent wakefulness (min)	89.48
Sleep Efficiency (%)	76.25

Condition	Description
HFC + no Activity	Stable NREM sleep
LFC + no Activity	Unstable NREM sleep
LFC + activity	Possible severely fragmented sleep or sleep onset period
VLFC + no Activity	REM sleep
VLFC + Activity	Wake

¹Total sleep time, total wake time and sleep efficiency are estimates based on CPC variables and activity measures.

² Defined as the first onset of HFC + no Activity or LFC with no Activity.

Body Position Statistics

Body Position	Duration (min)	Percent Of Sleep Period (%)
Supine	22.42	5.10
Left Side	175.30	39.88
Right Side	13.56	3.08
Prone	217.96	49.58
Up	9.89	2.25
Invert	0.00	0.00



Spectrogram

Figure 1: Full Spectrogram with 9h:36m of recorded time.

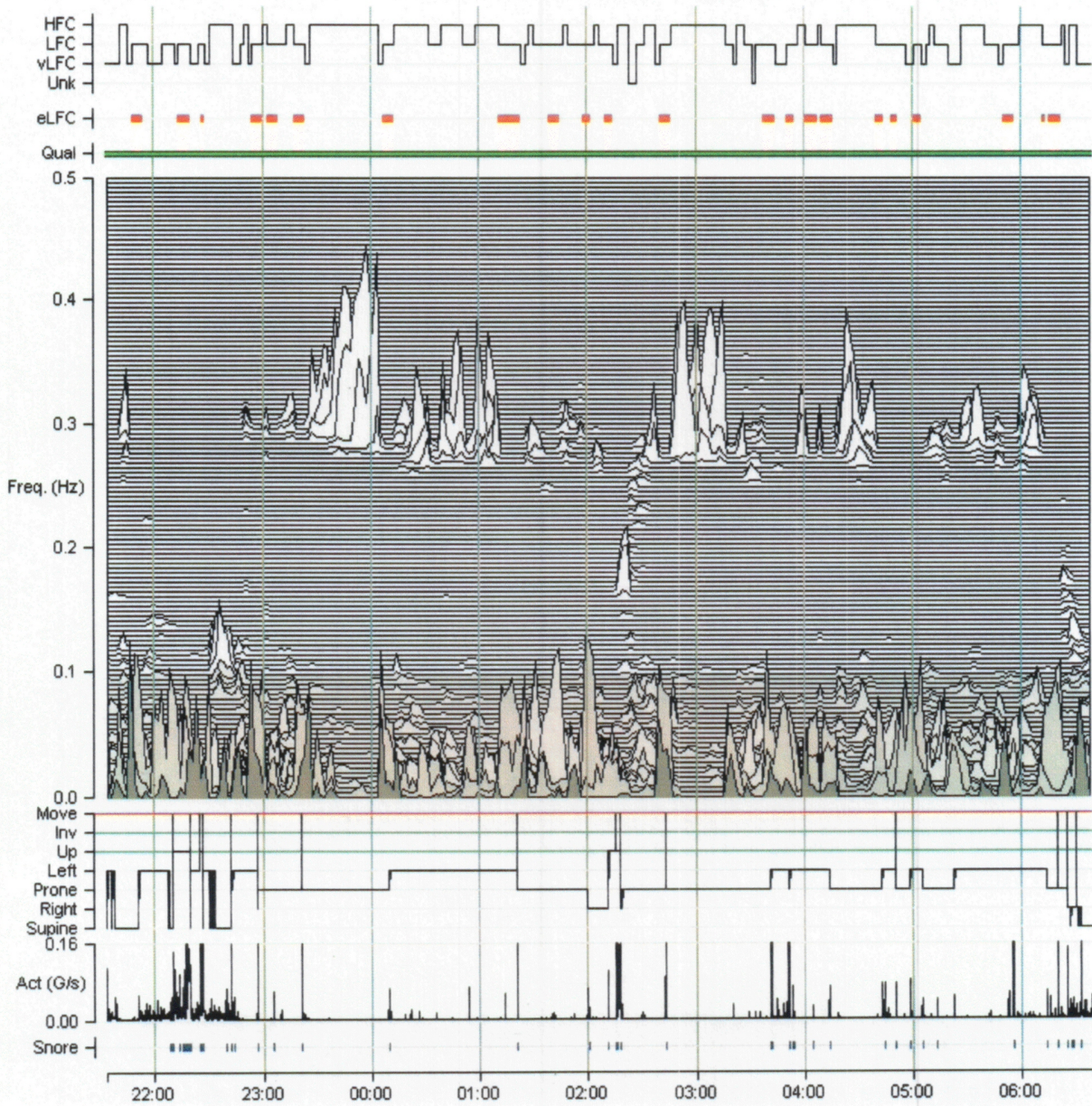
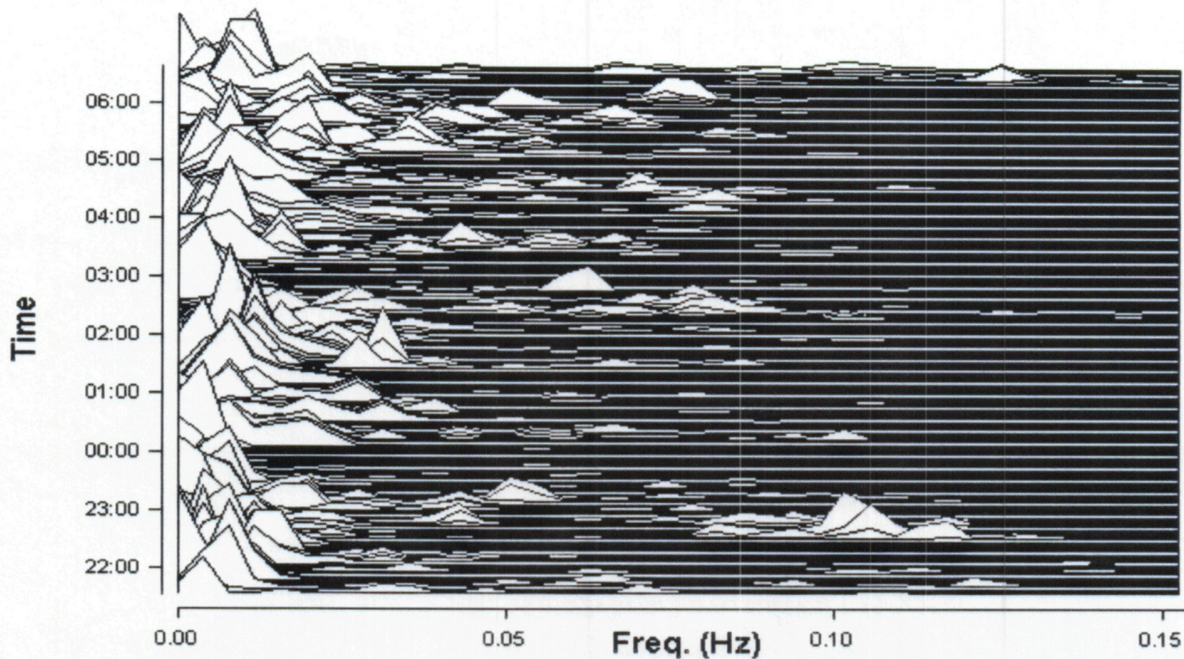




Figure 2: 90° Spectrogram View



Conclusions

Analysis Criteria

Glossary:

- **HFC:** associated with stable sleep.
- **LFC:** associated with unstable sleep as well as increased cyclic variation in heart rate.
- **VLFC:** associated with Wake or REM sleep
- **e-LFC Broad Band Coupling:** associated with obstructive sleep apnea. Other sleep disruption such as pain, noise, or stress may increase e-LFC.
- **e-LFC Narrow Band Coupling:** associated with central sleep apnea, classic periodic type breathing and obstructive respiratory events that cycle with a timing characteristic similar to central apneas. The narrow band pattern reflects enhanced chemoreflex effects on sleep-breathing.
- **e-LFC Broad and Narrow Bands:** best observed using the 90° view spectrogram. <15% of total sleep of e-LFC broad band is associated with normal sleep transitions from Wake into NREM sleep, from NREM sleep to REM, from REM into NREM sleep and from NREM sleep to Wake.
- **LFC:HFC ratio:** a measure of sleep instability.
- **HFC:LFC ratio:** a measure of sleep quality.

Other frequencies have not been investigated for their clinical significance and could reflect movement or artifacts.