Temporal relationship of sleep apnea and acromegaly: a nationwide study

Endocrine

Konstantina Vouzouneraki*, Karl A. Franklin, Maria Forsgren, Maria Wärn, Jenny Tiberg Persson, Helena Wik, Christina Dahlgren, Ann-Sofie Nilsson, Caroline Alkebro, Pia Burman, Eva-Marie Erfurth, Jeanette Wahlberg, Anna-Karin Åkerman, Charlotte Høybye, Oskar Ragnarsson, Britt Edén Engström, Per Dahlqvist

***** Corresponding author, Department of Public Health and Clinical Medicine, Umeå University
e-mail: konstantina.vouzouneraki@umu.se

Online Resource 2 and Online Resource 3

Online Resource 2 The questionnaire completed by the patient at the study visit.

Questionnaire for the patients

Name :_____

Personal identification number:_____

Date of visit :_____

	Yes	No	I don't know
1. Do you snore?	○	○	○
2. Have you noticed breathing cessations during sleep?	○	○	○
3. Do you feel rested after a nights sleep?	○	○	
4. Have you ever been investigated for sleep apnea?	○	○	○
a. If yes, when (year) and where? _____			
b. Did the investigation show sleep apnea?	○	○	○

c. If yes, do you have a treatment for sleep apnea? ○ CPAP ○ mandibular splint ○ Other:_____

Rate your probability of falling asleep in the following situations:

0 = would never doze, **1** = *slight chance of dozing,* **2** = *moderate chance of dozing,* **3** = *high chance of dozing*

	0	1	2	3
Sitting and reading	○	○	○	○
Watching TV	○	○	○	○
Sitting inactive in a public place (meeting, theatre, etc.)	○	○	○	○
As a passenger in a car for 1 hour without a break	○	○	○	○
Lying down to rest in the afternoon	○	○	○	○
Sitting and talking to someone	○	○	○	○
Sitting quietly after a lunch without alcohol	○	○	○	○
In a car, while stopped for a few minutes	○	○	○	○

Epworth Sleepiness Scale (ESS)

Score ≥10 is associated with sleep apnea, lower score does not exclude it. Score: _____points

Online resource 3. The questionnaire completed by the patient's treating endocrinologist and nurse during the study.

Questionnaire for the treating doctor and nurse

Name: _____

Personal identification number: _____

Patient's identification for the study _____

Date of birth: 19__/__/__ ○ Male ○ Female

Has given written informed consent ○ No ○ Yes

Date of acromegaly diagnosis: _____

Pituitary surgery ○ No ○Yes x1 ○Yes x2 ○Yes x>2

Pituitary radiotherapy ○ No ○ Yes

	Yes/No	**(year, month)**
• Has the patient had a myocardial infarction?	Y / N	_____
• Has the patient had a stroke?	Y / N	_____
• Is the patient smoking?	Y / never / quitted year	_____
• Current medical treatment for acromegaly?	Y / N	
○ Somatostatin analogue ○ Dopamine agonist ○ Pegvisomant		
• Has the patient current medical treatment for hypertension?	Y / N	
• Has the patient current medical treatment for diabetes?	Y / N	
• Has the patient current medical treatment for angina?	Y / N	
• Has the patient current medical treatment for heart failure?	Y / N	

Height _____cm Blood pressure (sitting) _____/_____mm Hg

Weight _____kg

Waist circumference _____cm Right index finger circumference _____mm

counted with: ○ rings ○ tape measure

S-IGF-1_____μg/l Reference for age_____μg/l

- Is the patient's acromegaly biochemically controlled? Yes / No
  (S-IGF-1 in the reference range for age)

- **Referred to sleep investigation**:
  - ○ *Written referral sent at today's visit.*
  - ○ *No – has previously been investigated for sleep apnea – please see page 1.*
  - ○ *No – very low clinical suspicion for sleep apnea at today's visit.*

Is there a referral response from the sleep clinic? ○ No ○ Yes

Date of investigation _____

Other information: _____