#### 4 How is Obstructive Sleep Apnoea Treated? 有哪些醫治的方法?

Your medical specialist will provide carefully considered treatment following the consultation, thorough examination, and testing.

醫治方法需視平病因和病情而定。

#### Treatment for Children 小孩的醫治方法

In the case of children suffering from sleep apnoea due to enlarged tonsils and adenoids, surgery may be advised to remove the tonsils and adenoids. Some 80-90% will be cured as a result of this surgery.

Reducing the body weight is a help to some overweight children, and nasal congestion may be relieved by medication. Some child sufferers however may be advised by their doctor to use a special machine called a 'Nasal CPAP'.

如因扁桃腺或增殖體過大所致,約八至九成小孩可通過外科 切除手術根治。

控制體重對部份過重兒童有明顯的幫助,藥物亦有助緩和鼻塞的問題。另外,少部份小孩患者亦可以在醫生指示下暫時使用「正氣壓呼吸機」。



#### Treatment for Adults 成人的醫治方法

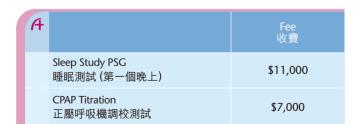
The most effective treatment for adults is the use of a CPAP machine via a mask, which generates continuous positive air pressure to splint open the upper airway, preventing its collapse during sleep. Many sleep apnoea patients experience considerable benefit using this machine, and state they have more energy the next day, and feel much more alert. A referral to an ENT specialist for upper airway assessment is advisable. (Some sufferers gain relief by using a specially moulded plastic mouth insert (orthodontic prosthesis) which holds the jaw forward thus preventing snoring.)

對成人患者來說,在睡覺時使用連口罩的「正氣壓呼吸機」是最有效的方法。它可以持續地產生正氣壓以打通上呼吸道,以保持空氣流通。許多患者使用後都深覺效果不錯,並表示第二天醒來會覺比沒有使用時精神,警覺性也較高。醫生亦會考慮轉介病人到耳鼻喉科進行詳細的上呼吸道檢查。(小部份患者可通過外科手術或於睡覺時配戴牙托來改善病情。)

#### How Much does the Sleep Test Cost? 睡眠測試收費如何呢?

Hong Kong Adventist Hospital – Tsuen Wan provides a comprehensive and professional in-patient diagnostic and treatment service, as described as follows.

本院設有睡眠窒息症住院診斷服務,有關服務計劃詳情如下:



#### Please note 備註

The stated costs include the equipment fee but exclude the following charges:

以上費用已包括使用有關儀器的費用,但不包括下列項目收費

- + Doctor's fees
- + Emergency procedures, and any additional special equipment used
- + Additional laboratory tests, X-rays or Ultrasounds, Intravenous therapy, and any additional drugs prescribed by the doctor
- + Room rental fee
- + Registration fee
- + Detailed explanation of medical report by physician
- + 醫生費
- + 額外緊急服務或非常規程序收費
- 額外化驗、治療、藥物或護理費用
- + 房租
- + 入院登記費
- + 醫生詳細解釋醫療報告

Note: Only applicable to 1-bed room or 2-bed room and for adults only.

備註:僅適用於一人房或二人房,亦只適用於成人。



# Preparation for Obstructive Sleep Apnoea Testing 如確定接受測試,請留意以下事項

- + On the day of the test, you are advised to continue your normal work program. Please avoid taking a rest during the day, such as an 'afternoon nap'
- + Avoid taking stimulants, such as coffee, tea, wine or Coca Cola drinks
- + Inform your doctor regarding any drugs that you are currently taking, along with the dosages of these drugs
- + Bathe, and wash your hair prior to admission to hospital. Avoid using any moisturizing creams on your skin, and do not use any hairspray
- + Wear loose fitting pajamas with a buttoned opening at the front
- + 接受測試當天日間仍可如常工作或活動,但不要小睡
- 當天請勿飲用剌激性飲料,如咖啡、茶、酒類和可樂汽 水等
- + 如正服用藥物,請告知醫生服用的種類和分量
- + 宜在家中洗頭和沐浴後才入院,但勿塗上潤膚油和噴髮膠
- + 為方便接駁儀器,宜穿上開胸的鬆身衫褲型的睡衣

# A Registration and Enquiries 登記及查詢

A referral from a physician is required for the sleep apnoea testing and treatment.

For all inquiries, please contact our staff.

進行睡眠測試和治療須由醫生轉介,如有任何疑問及查詢 可致電本院職員。

Adult 成人:(852) 2275 6800 Child 兒童:(852) 2275 6600





## Adventist 港 Health 安

Mini Bus Terminal 專線小巴總站

專線小巴總站

Hong Kong Adventist Hospital • Tsuen Wan 香港港安醫院 • 荃灣

Sleep Apnoea 睡眠窒息症



To the Hospital Via Castle Peak Road:

- + Alight at Tsuen King Circuit Flyover
- + Take the bus in front of Tsuen King Circuit Police Station

所有行經青山公路荃灣段之巴士:

- + 於荃景圍天橋站下車
- + 然後步行至荃景圍警署轉乘巴士到醫院。

# Minibus 專線小巴

Map 路線區

95M Tsuen Wan MTR 荃灣港鐵站 95 Nina Tower 如心廣場 84 Tsuen Wan Chung On Street 荃灣眾安街

4 小時急診中心 Hour Urgent Care Center

Adventist 港 Hong Kong Adventist Hospital・Tsuen Wan Health 安 香港港安醫院・荃灣

Address 地址: 199 Tsuen King Circuit, Tsuen Wan, N.T. 新界荃灣荃景圍199號

新茶全灣全京團 19 Telephone 電話:(852) 2275 6688 Fax 傳真:(852) 2275 6767

Fax 傳真:(852) 2275 6767 Website 網站:www.twah.org.hk

Valid date 有效期至:2024/12/31

The Hospital reserves the right to change or amend details with out prior notification.

For the latest information, please visit our website at www.twa h.org.hk

如有任何資料調整或變更,本院毋須另行通知。

如有任何資料調整或變更,本院毋須另行週知。 如欲查閱最新資料,請瀏覽本院網站www.twah.org.hk。

N-2311













#### Is Obstructive Sleep Apnoea (OSA) Common in Hong Kong? 在香港,阻塞性睡眠窒息症是否普遍?

As many as 25% of the elderly suffer from obstructive sleep apnoea, and surprisingly, some 1-3% of children display symptoms. Overall, in the adult population, obstructive sleep apnoea affects 4% of males, and 2% of females.

估計約有1%至3%小孩、4%中年 男性、2%中年女性和25%長者患 上這疾病。



#### What is Obstructive Sleep Apnoea? 甚麼是睡眠窒息症?

Obstructive sleep apnoea in adults is defined as a ten-second breathing pause, occurring more than five times per hour of sleep. It is due to obstructed upper airway. Because of the bodies' protective mechanism, which senses the resultant lack of oxygen, the sufferer awakens and takes a deep breath before once again falling asleep. This sequence of interrupted breathing and sleep disturbance, can develop into a cyclical pattern.

簡單來說,就是睡覺時經常因上呼吸道受阻引致窒息。當無法 暢順呼吸甚至窒息時,血液的含氧量就會降低。基於人體的自 我保護機制,當事人會蘇醒過來維持呼吸,如是者整晚不斷 循環。以成年人而論,如果在睡眠時出現呼吸停頓超過十秒 而每小時超過五次,就會介定為患有睡眠窒息症。



#### What are the Symptoms of Obstructive Sleep Apnoea? 如患上這種疾病,有甚麼病徵?

One of the most obvious indicators is stertorous breathing (loud snoring) over a considerable period of time. The majority of sufferers experience general fatigue during daylight hours, as well as a loss of energy, lack of concentration, irritability, forgetfulness, and a frequent desire to sleep. Some children who suffer from sleep apnoea are observed to sleep with odd posture. It is important not to ignore these symptoms, as severe cases may develop serious complications, including heart attacks and strokes.

最明顯的病徵是響亮且連續性的鼻鼾聲,並持續超過三個月。 由於睡不安寧,大部份患者都有日間渴睡、精神不集中、打瞌 睡、脾氣暴躁、沒記性等徵狀,小孩子還會以青蛙般的睡姿來 睡覺。如果情況嚴重,有可能影響心肺功能,引致高血壓和令 心臟負荷增加。

#### Adult Symptoms 成人徵狀包括

+ Excessive snoring

+ Loss of energy

+ General fatigue with a desire to sleep during the day

+ Morning headache

Impaired judgment

+ Lack of concentration

+ Forgetfulness

+ Sexual dysfunction

#### 鼻鼾聲大

睡醒後仍覺疲累

在任何環境下都會打瞌 睡,如工作或駕車時

早上感到頭痛

無法集中精神

記憶力衰退

性慾減退

反應緩慢

# Child Symptoms 小孩徵狀包括

+ Excessive snoring

+ Restless sleep

Sleeping with odd posture

Impaired physical development

+ Hyperactivity

人叠積梟 輾轉反側

不尋常睡姿

發育不良

過度活躍

#### Who are those More Likely to Suffer from Obstructive Sleep Apnoea?

#### 哪類人會較易有睡眠窒息問題?

The elderly, the overweight (BMI over 25 kg/m2), those suffering from metabolic disorders, heart disease, chronic lung disease, nasal allergies, and those with an abnormally small lower jaw.

A recent study in Hong Kong found that sleep apnoea is more common amongst commercial drivers, and that there is six times the risk of having a motor vehicle accident for all who suffer from sleep apnoea.

體質指標(BMI)超過二十五的人士、長者、患有代謝症候群 心臟病、慢性肺部疾病等長期病患者、患嚴重鼻敏感或先天下 顎細小的人都是高危族。過去,本港亦有研究發現職業司機的 患病比率較高,值得留意的是,他們發生交通意外的機會亦比 常人高出六倍。

#### What Causes Obstructive Sleep Apnoea? 它的成因是甚麼?

The causes differ for adults and children.

成人和小孩患病的原因不盡相同。

#### Causes of Obstructive Sleep Apnoea in Children 小孩病因

Sleep apnoea often occurs between the ages of 4-8 years of age in children who have enlarged tonsils and adenoids. Nasal allergies and an exceptionally small lower jaw may also be contributing factors, along with obesity. Studies indicate though that the risk for obese children suffering from sleep apnoea is ten times greater than in children of a normal healthy weight.

小孩的發病年齡通常在四至八歲左右,多數是因為扁桃腺或增 殖體過大所致,其他病因包括鼻敏感和下顎細小。另外,肥胖 兒童患睡眠窒息的機會率較體重正常的兒童高十倍。

### Causes of Obstructive Sleep Apnoea in Adults 成人病因

The causes for sleep apnoea in adults is more complicated, with obesity being by far the most common cause. Nasal allergies, nasal deviation, abnormalities of the jaw, and obstructed airways, may also be contributing factors.

成人的病因較複雜,肥胖、嚴重的鼻敏感、鼻中間骨偏側、 下顎細小、下顎肌肉鬆弛等都是它的成因,其中又以肥胖最為 常見。

#### What Should I Do if I Think I may be Suffering from Obstructive Sleep Apnoea? 如果發現了上述病徵,應該怎辦?

It is important to arrange a consultation with your doctor if you are experiencing any of the symptoms mentioned earlier in regard to sleep apnoea, just to make sure.

As sleep Apnoea causes general fatigue during the day with an increased desire to sleep, this can not only interrupt your daily work program, but can prove to be dangerous in relation to particular work activities, such as driving a motor vehicle, or using machinery.

In severe cases, sleep apnoea can also affect the brain development in children.

The 'Self Assessment Questionnaire' below will assist you in determining if you may in fact suffer from sleep apnoea. If in doubt, consult your doctor for an accurate diagnosis.

睡眠窒息症不僅會影響日間的精神狀況,甚至有可能影響小孩 子的腦部發育,所以一旦發現長時間有鼻鼾,或對情況有懷疑, 宜立即到醫生處檢驗和接受睡眠呼吸檢查,切勿拖延。

另外,通過以下的《自我檢測問卷》,亦有助初步分析出患上 睡眠窒息症的機會,但只能作為參考,若要準確診斷,最好還 是請教專科醫生。

Sleep Apnoea

### A Self Assessment Questionaire 自我檢測問卷

The 'total score' represents you may suffer from sleep apnoea, and you should arrange a consultation with your doctor.

Do you experience excessive sleepiness during the following

0 -Never / 1 - Seldom / 2 - Frequently / 3 - Continually 請根據 下列情況時,打瞌睡或睡著的頻密程度給予分數,然後將總分加 起來。

0分一從不,1分一很少,2分一間中,3分一經常

Reading 坐下來閱讀 Watching TV 看電視

At the movies or relaxing in a 在戲院或公園等公共場所

When traveling for more than 乘搭交通工具超過一小時

When you lie down for a rest 於環境許可時躺下休息

Whilst seated and in 坐下和別人交談 conversation with someone

Resting after a meal which 餐後坐下休息,但沒有喝含 does not include alcohol 洒精飲品

Waiting in heavy traffic 乘車或駕車期間,需要停車 等候的時候

#### **Score Analysis**

A Score of 7-8: Primary snoring may be the diagnosis, if there are no other symptoms present relating to sleep apnoea.

A Score of 9 : A possible sufferer of obstructive sleep apnoea, and it is highly recommended that you consult with your doctor and have a comprehensive examination.

結果分析

:沒有明顯阻塞性睡眠窒息症,多數是普通的鼻鼾

: 很可能已患上阻塞性睡眠窒息症, 建議諮詢醫生 9分或以上 的意見和安排詳細睡眠檢測

#### How does the Doctor Make a Diagnosis? 有哪些方法可以診斷這種疾病?

Following your consultation with a medical specialist, the patient may be advised to undergo a sleep study program to assess his/her individual sleeping pattern. Using Polysomnography, the presence of snoring, the breathing pattern, as well as the blood oxygen levels, are monitored and recorded. Eye movements during sleep, the flow of air through the nose and mouth, the movement of the chest wall and the chin position this program to record any abnormal heart rhythms.

Following the initial polysomnography in-patient test and confirmation of the diagnosis of sleep apnoea, the medical specialist may (depending on the degree of sleep apnoea diagnosed), arrange for a second night in-patient CPAP Titration Study, in order to determine the best treatment for the patient.

它可以通過客觀的睡眠呼吸檢查來幫助斷症。方法是在懷疑患 者身上接駁上睡眠分析儀,然後在醫院睡一晚,以記錄入睡後 各項生理數據,包括腦電波、眼球活動、心電圖、氣流量和 血氧飽和度等。醫生會根據這些數據和病徵,結合臨床經驗來 診斷。

經專科醫生初步診斷後,如懷疑患上睡眠窒息症,會安排住院 接受睡眠測試。經第一個晚上住院接受睡眠測試後,如證實患 有睡眠窒息症,專科醫生會視乎病情的嚴重程度,為患者安排 第二晚住院,以摘取所需數據,找出患者對正壓呼吸機的接受 程度和調校度數。





