

Healthnews

RafflesHospital

BILLING ADVICE

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All-in Fixed Price Packages Cap Medical Bills For Patients

Uncertainty over the size of a hospital bill has always been a cause for anxiety for patients, especially when one is due for major surgery.

But patients can now breathe easy with Raffles Hospital's new fixed price packages for surgeries such as total hip replacement, total knee replacement and coronary artery bypass graft (CABG).

TYPE OF OPERATION	DAYS OF STAY	FIXED PRICE PACKAGE		
		4-Bed	2-Bed	Single Bed
Total Knee Replacement (unilateral with implants, exclude MRI / CT scan)	Up to 5 nights	S\$12,800	S\$13,800	S\$14,800
Total Hip Replacement (unilateral with implants, exclude MRI / CT scan)	Up to 6 nights	S\$13,800	S\$14,800	S\$15,800
Coronary Artery Bypass Graft (CABG)	Up to 8 nights	S\$15,700	S\$18,000	S\$20,500

Note:
 Prices exclude GST
 Subject to risk assessment by specialist

Learning to Recognise a Stroke

DR KEITH GOH YU-CHING
CONSULTANT NEUROSURGEON



A stroke or cerebrovascular accident is the result of brain damage from either inadequate blood flow or the rupture of a blood vessel to a particular area of the brain.

The resulting neuronal injury may cause paralysis or coma. Strokes can sometimes recover within 24 hours, and these are known as “transient ischaemic attacks”.

Incidence

In developed countries, the incidence of stroke is increasing. In the United States, stroke is the third leading cause of death after heart disease and cancer, with an estimated 700,000 new stroke patients every year. In Singapore, stroke is a similarly common condition, with about 9,000 new stroke patients every year.

Types of Stroke

Ischaemic Stroke



Figure 1. MRI scan showing cerebellar

This occurs when the blood supply to the brain is significantly reduced and as a result, the affected part of the brain is damaged. This can occur if a blood vessel is blocked or if the cerebral perfusion pressure is low, such as in heart failure. Usually the brain tissue becomes ischaemic at first, and if this insult is prolonged, an infarct will result.

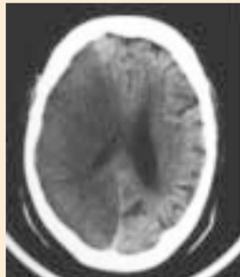


Figure 2. CT scan showing massive MCA

Blockage of the major arteries such as the internal carotid artery or basilar artery can result in massive infarcts which are life-threatening.

Similarly, blockage of the major veins leads to brain congestion, swelling and ultimately infarction.

Haemorrhagic Stroke

This is different from an ischaemic stroke in that the blood vessels in the brain rupture. The resulting brain haemorrhage can take 2 main forms, i.e. intracerebral clots or subarachnoid haemorrhage.



Figure 3. CT scan showing spontaneous left basal ganglia haemorrhage, likely from hypertension

In the former case, the main cause is usually hypertension or an arteriovenous malformation, and in the latter case, the cause is usually an aneurysm.

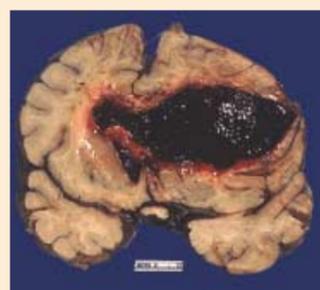


Figure 4. Postmortem brain showing large intracerebral haematoma



Figure 5. Postmortem brain

Risk Factors

The following factors have been proven to be associated with increased risk of stroke:

1. Hypertension (High blood pressure)
2. Diabetes Mellitus
3. Smoking
4. Heart disease
5. Hypercholesterolaemia (High cholesterol)
6. Stress

Signs and Symptoms of Stroke

A stroke usually presents with neurologic deficits such as weakness, numbness or tingling of the face, arm or leg, especially on one side of the body, facial asymmetry or difficulty with walking and coordination.

Sometimes there is inability to speak or slurring of speech, swallowing difficulties, confusion and personality change. This can be associated with severe headaches, dizziness, blindness, loss of consciousness, and loss of bowel and bladder control.

It is difficult to distinguish ischaemic from haemorrhagic stroke, except in terms of time. Brain haemorrhage occurs more suddenly and without warning, and is associated with severe headache.

If a stroke is suspected, it is important to seek medical attention without delay. Life-saving measures can be undertaken so as to reduce the brain insult and improve the longer term outcome.

Investigations

When a stroke is suspected, the investigations which will be performed are either computer tomographic (CT) scan of the brain, which takes only 1-2 minutes to perform, or magnetic resonance imaging (MRI) of the brain which takes about 30 minutes but gives more detailed information.

The patient's clinical condition will determine which is the most appropriate test. Once the diagnosis of a stroke is confirmed, treatment can then be started.

Treatment Options

Ischaemic Stroke

If there is evidence of a large infarct, the mass effect from the infarct may require surgical decompression.

If the patient recovers and is stable, then the next step is for an ultrasound study to assess if there is any stenosis of the internal carotid arteries in the neck.



Figure 6. Infarct after decompression

In cases with severe stenosis, a surgical procedure to remove the atherosclerotic plaque, known as carotid endarterectomy can be performed. This has been proven to reduce the further occurrence of stroke in such patients.



Figure 7. Angiogram

However in most cases, the stroke is a transient attack and the stenosis may involve only the small intracranial vessels. The most appropriate treatment therefore is antiplatelet medication such as Aspirin or Plavix, or even anticoagulation with heparin or warfarin.

Anticoagulation is especially needed in patients with a cardiac cause for the ischaemic stroke, such as atrial fibrillation where emboli are given off.

Haemorrhagic Stroke

In the acute stage, the patient may have a large blood clot as a result of the rupture of a blood vessel. In patients with hypertension, the most common sites are the basal ganglia, thalamus or cerebellum.

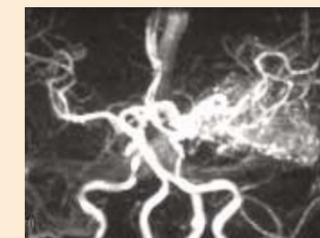


Figure 8. MRA showing left

Craniotomy for evacuation of the blood clot may be necessary. If this occurs in children or young adults, a cerebral angiogram is needed to exclude an arteriovenous malformation, which is the most common cause of intracranial haemorrhage in this age group.

When there is subarachnoid haemorrhage, an angiogram should also be performed because the most common cause is a ruptured berry aneurysm. This must be treated as soon as possible because the risk of re-rupture is very high in the first 48 to 72 hours.

If an aneurysm is detected, modern treatment techniques will involve either endovascular coiling by an interventional neuroradiologist or microsurgical clipping by a neurosurgeon.

Rehabilitation

In all patients who suffer a stroke, the recovery process can sometimes take 6 months to a year. Even then, depending on the severity of the stroke, the patient may or may not recover 100% to his original pre-stroke condition. Often the patient will have difficulties speaking, eating, swallowing, walking and performing common tasks. Physical therapy is therefore very important, as is speech and occupational therapy. Therefore, it is important to recognise the risk factors for stroke, and take active preventive measures where possible.

Life after Stroke –

Physiotherapy Management for Stroke Patients



Stroke is an abnormal condition of the brain characterized by occlusion of blood vessels. Paralysis, weakness, sensory change, speech defect, aphasia or death may occur as a result of stroke.

MS NG LIH YEN
PHYSIOTHERAPIST

Physiotherapy aims to restore a person to his optimal functional potential within the limits of his abilities and needs. He learns simple positioning and passive stretches, movements that will help him maintain muscle and joint range.

Mobilisation of the patient is encouraged as soon as the medical condition allows. This is done in the form of re-education of motor function, coordination, balance, gait and transfer.

During the stay in hospital, family members should be taught appropriate handling skills to ensure that they continue to integrate physiotherapy into their daily routine.

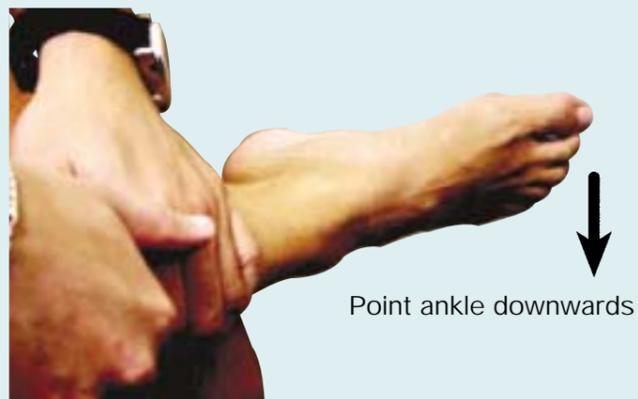
The aim of rehabilitation is to enable the recovering patient to experience a normal life as soon as possible. Hence rehabilitation does not stop at the stage of discharge from the hospital but continues long after the patient has returned to the community.

Daily activities such as eating, dressing, walking and bathing are all part of the rehabilitative programme. To prevent the condition from worsening, daily exercises should be carried out to maintain range of motion and muscle strength.

Family and friends can do their part by being encouraging and lending a helping hand.

Below are some simple exercises which can be done at home

Ankle Exercises



Shoulder Exercises



Clasp hands as shown in picture. Raise hands up above the head.

Elbow Exercises



Clasp hands as shown in picture.



Bend elbow towards one side of the shoulder.

Turning in Bed

Step 1: Lie face up. Bend both knees and clasp hands towards the ceiling



Step 2: Turn head towards one side, move the clasp hands towards the same side. Turn the whole lower body.



Step 3: Repeat the same exercises with the other side.

Lower Leg Exercises

Lying face up, bend both knees and place both hands by the side. Push foot down and raise your back.



Medical Masquerades

BY DR BINA KURUP
SENIOR FAMILY PHYSICIAN

How many times have you dismissed your symptoms as minor, and sought medical attention a little bit too late? Often, more serious problems can be averted with earlier detection and treatment.

In the majority of times though, these symptoms do not necessarily portend serious medical illnesses, with no real need for panic. However, it is still prudent to be vigilant and seek advice from your family doctors.

This series will discuss some of these seemingly innocuous symptoms which may turn out to be something more serious because of the way they mimic each other.



Gastric Pain
is it just 'Gastritis'
and 'Indigestion'
or is it...

Heart Problem

Occasionally, pain in the 'gastric' area may actually indicate an underlying heart problem. This may either be 'angina' (where the blood circulation to part of the heart is compromised but not damaged) or a heart attack or 'infarct' in which there is heart muscle damage.

The typical symptoms of a heart attack, which includes chest pain, sweateness, breathlessness, giddiness or radiation of pain down the left arm or up the neck, may not be present. In fact, the latter symptoms may occur in isolation or in combination without chest pain.

The other point to note is that even in patients with diagnosed gastritis or peptic ulcer, all episodes of 'gastric' pain need not necessarily mean that the pain is from the stomach.

Risk factors like hypertension, diabetes, smoking or obesity increases the risk of a heart problem and this should alert you and your doctor to the possibility of a more serious problem.

Discomfort triggered by exertion, cold, meals and stress may also point towards a possible heart problem.

Gallstones

Though this may not be as serious as a heart problem, it can cause complications if not recognised. Patients with 'gastric' pain may self-medicate with antacids for years before they seek medical attention.

Your family doctor is likely to advise further investigations including gastroscopy, Barium meal or

an ultrasound of your abdomen to determine the cause of your symptoms.

Gallstones can present with upper abdominal pain, belching or nausea. It can occasionally be complicated with severe pain or infection which may warrant hospitalisation.

Fatigue
is it just 'Stress'
and 'Exhaustion'
or is it...

Hypothyroid

In this condition, the thyroid hormone, secreted by the gland in front of the neck, is low. There may be several reasons for this, including low iodine intake, immune damage to the thyroid gland or previously treated hyperthyroidism (with surgery or radio-iodine therapy).

The problem with this condition is that the symptoms are very insidious and present themselves rather late. Some of the early symptoms of this condition include:

- Bone and Muscle Pain
- Constipation
- Cold Intolerance
- Fatigue
- Hair Loss
- Lethargy
- Muscle Cramps
- Pale Complexion
- Thin Brittle Nails
- Weakness

Although some of the above symptoms may be non-specific and overlap with other medical conditions, your doctor can easily confirm this condition based on blood test results.

The good news is that with treatment, there is remarkable improvement in appearance and mental function.

Miscellaneous Causes

Some of the other causes of fatigue include:

- Infections (e.g. Hepatitis)
- Drug Side-Effects (e.g. Propranolol, Sedatives)
- Occult (Hidden) Cancers
- Heart Failure
- Psychological Conditions (e.g. Insomnia, Depression)



Often the cause may not even be determined and patients may develop a Chronic Fatigue Syndrome. The underlying cause of the latter is, to date, unknown even though several theories abound.

Anaemia

Anaemia is a condition in which there is a low haemoglobin count, which is the oxygen-carrying protein to all parts of the body.

If this haemoglobin level is low, one feels increasingly tired, breathless, giddy or even experiences chest pain.

There are several causes of anaemia which can be easily confirmed with a blood test. As it is treatable in most instances, seeing your doctor early will certainly help you feel much better and more active (perhaps even ready to run a marathon!)

Genetic causes of anaemia such as Thalassemia, are less amenable to treatment and is of particular importance during pregnancy,



Diarrhoea

is it just
'Food Poisoning'
or is it...

Acute Appendicitis

In the early stages of appendicitis, one may just experience non-specific diarrhoea, abdominal pain and vomiting, with or without fever. These symptoms may remain so until the advanced stage (which occurs quite rapidly) where the risk of perforation is high.

In the typical case of appendicitis, the pain usually starts around the navel and will radiate down to the right lower abdomen. This is usually associated with nausea, vomiting, poor appetite and fever.

If the diarrhoea in 'food poisoning' does not settle within one to two days, or if there is fever with severe abdominal pain, see your Family Doctor or go straight to the Hospital Emergency Department, to exclude appendicitis or other more serious abdominal conditions.

Miscellaneous Causes

These are the less serious causes, but should be considered so that the appropriate advice and treatment can be given.

Patients should highlight the following, where applicable, to their Doctor when presented with diarrhoea.

Other causes of acute diarrhoea include:

- Dietary Indiscretion
- Specific Change in Diet
- Use of Painkillers (e.g. Ponstan, Synflex etc.)
- Use of Antibiotics

You will notice from the above discussion that even minor symptoms may mean more than you think. When to see your doctor, without going to throes of panic at the slightest of symptoms, is difficult to determine.

However, should your symptoms persist or are recurrent, or if they become increasingly severe or associated with other symptoms, it is best to see your family doctor for a thorough evaluation.

Wellness 2004

Lay the foundation for good health

This 2004, lay a strong groundwork to good health. Sign up for one of our 5 Foundation Packages to find out your baseline health status. Top it off with any of our Risk Specific Health Screening Packages that meets your individual health needs.

Foundation Packages

Lifestyle Screening Package[#] \$38
Height & Weight • Body Mass Index • Blood Pressure • Lipid Screen • Blood Glucose • Uric Acid • Doctor's Review • Raffles Health Supplements

Cardiovascular Screening Package[#] \$48
Blood Glucose • Cholesterol • Uric Acid • Electrocardiogram • Doctor's Review • Raffles Health Supplements

Basic Health Screening Programme

- ♦ **Raffles Basic Health Review Package[#] \$118**
Hematological Screen • Liver Function Screen • Kidney Function Screen • Lipid / Cholesterol Profile • Endocrine Screen [Blood Glucose (Diabetes) & Uric Acid (Gout) Levels] • Resting 12 Lead Electrocardiogram • Urinalysis • Medical Report • Clinical Measurements • History & Physical Examination • Doctor's Review • Raffles Health Supplements

- ♦ **Basic Health Screening Plus Package^{#+} \$218**
Hematological Screen • Liver Function Screen • Kidney Function Screen • Lipid/Cholesterol Profile • Endocrine Screen [Blood Glucose (Diabetes) & Uric Acid (Gout) Levels] • Resting 12 Lead Electrocardiogram • Urinalysis • Clinical Measurements • History & Physical Examination • Medical Report • Treadmill • Doctor's Review • Raffles Health Supplements

Well Women Screening Programme

- ♦ **Well Women Basic Screening Package A⁺ \$128**
Pap Smear • Ultrasound Pelvis • Doctor's Review • Raffles Health Supplements

- ♦ **Well Women Basic Screening Package B⁺ \$198**
Mammogram (Bilateral) • Pap Smear • Hormone Screening (FSH, LH, E2) • Doctor's Review • Raffles Health Supplements

- ♦ **Well Women Plus Package A^{#+} \$198**
Comprising:
- Basic Health Review
- Well Women Basic Screening Package A

- ♦ **Well Women Plus Package B^{#+} \$248**
Comprising:
- Basic Health Review
- Well Women Basic Screening Package B

All prices include GST and are valid for Year 2004

[#]Fasting is required

^{*}Appointment at Raffles Hospital is required

Risk Specific Packages

Arthritis Screening Package \$128
Uric Acid • ESR • Rheumatoid Arthritic Factor • Anti Nuclear Antibody • DS-DNA • Doctor's Review • Raffles Health Supplements

Liver Screening Package \$48
Liver Function Test • AFP • Doctor's Review • Raffles Health Supplements

Optional: Ultrasound Liver^{} \$88**

Osteoporosis Screening Package⁺ \$148
Bone Marker • Densitometry • Doctor's Review • Raffles Health Supplements

Premarital Screening Package \$128
Hb Electrophoresis • Complete Blood Count • Blood Grouping • VDRL • HIV AG & AB • Hepatitis B • Doctor's Review • Raffles Health Supplements

Renal Screening Package[#] \$68
Urea & Electrolytes • Blood Glucose • Urine MicroAlbumin • Doctor's Review • Raffles Health Supplements

Cancer Risk Assessment^{#+}
(Price applicable only when taken up with any screening package)

- ♦ **Nasoscopy (Screening only) \$98**
- ♦ **Gastroscopy (Screening only) \$399**
- ♦ **Colonoscopy (Screening only) \$840**
- ♦ **Full Body CT \$680**

Cardiac Assessment⁺
(Price applicable only when taken up with any screening package)

- ♦ **Treadmill \$178**
- ♦ **2D Echocardiogram \$260**
- ♦ **24 Hour Blood Pressure Monitoring \$170**
- ♦ **Holter Monitoring \$200**

Immunisation Programme

- ♦ **Hepatitis A Screening \$18**
- ♦ **Hepatitis B Screening \$18**
- ♦ **Hepatitis A Vaccination \$75**
- ♦ **Hepatitis B Vaccination (Adult / Child) \$18**
- ♦ **Hepatitis A & Hepatitis B (Twinrix) \$88**
- ♦ **Meningococcal Vaccination \$45**
- ♦ **Influenza Vaccination \$21**
(exclude adjuvanted vaccines)

For more information, please contact us at **6311 1111**

Email: enquiries@rafflesmedical.com

Directory of Specialists

Cardiology (Raffles Heart Centre - Level 12)

- Prof Lim Yean Leng
- Dr Ng Wai Lin
- Dr Chee Tek Siong

Cardiothoracic Surgery (Raffles Heart Centre - Level 12)

- Dr Wu Dar Ching

Dentistry & Dental Surgery (Raffles DentiCare - Level 13)

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- Dr Pang Soon Eng
- Dr Myra W J Elliott

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- Dr Wong Soon Tee

Diagnostic & Interventional Radiology (Radiology - Level 2)

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- Dr Tseng Yeh Gavin

Ear, Nose & Throat (Raffles Eye & ENT Centre - Level 2)

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- Dr Aw Chong Yin
- Dr Lim Chong Teck

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- Dr Nagayama Kenichi

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- Dr Ng Bee Lim

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- Dr Wong Soon Tee

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- Dr Ho King Hee

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- Dr Keith Y C Goh

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- Dr Elizabeth Au

Ophthalmology (Raffles Eye & ENT Centre - Level 2)

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- Dr Lim Yit Jean
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- Dr Teh Kong Chuan

Urology (Raffles Surgery Centre - Level 1)

- Dr Enoch Gan
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The information contained in this publication should not be regarded as a substitute for detailed medical advice in individual cases.

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