

Sowkhya

MagazineTM

Swine Flu Special

Learn the Facts and How You Can Protect Yourself

Brain Power!

The Amazing Human Brain!

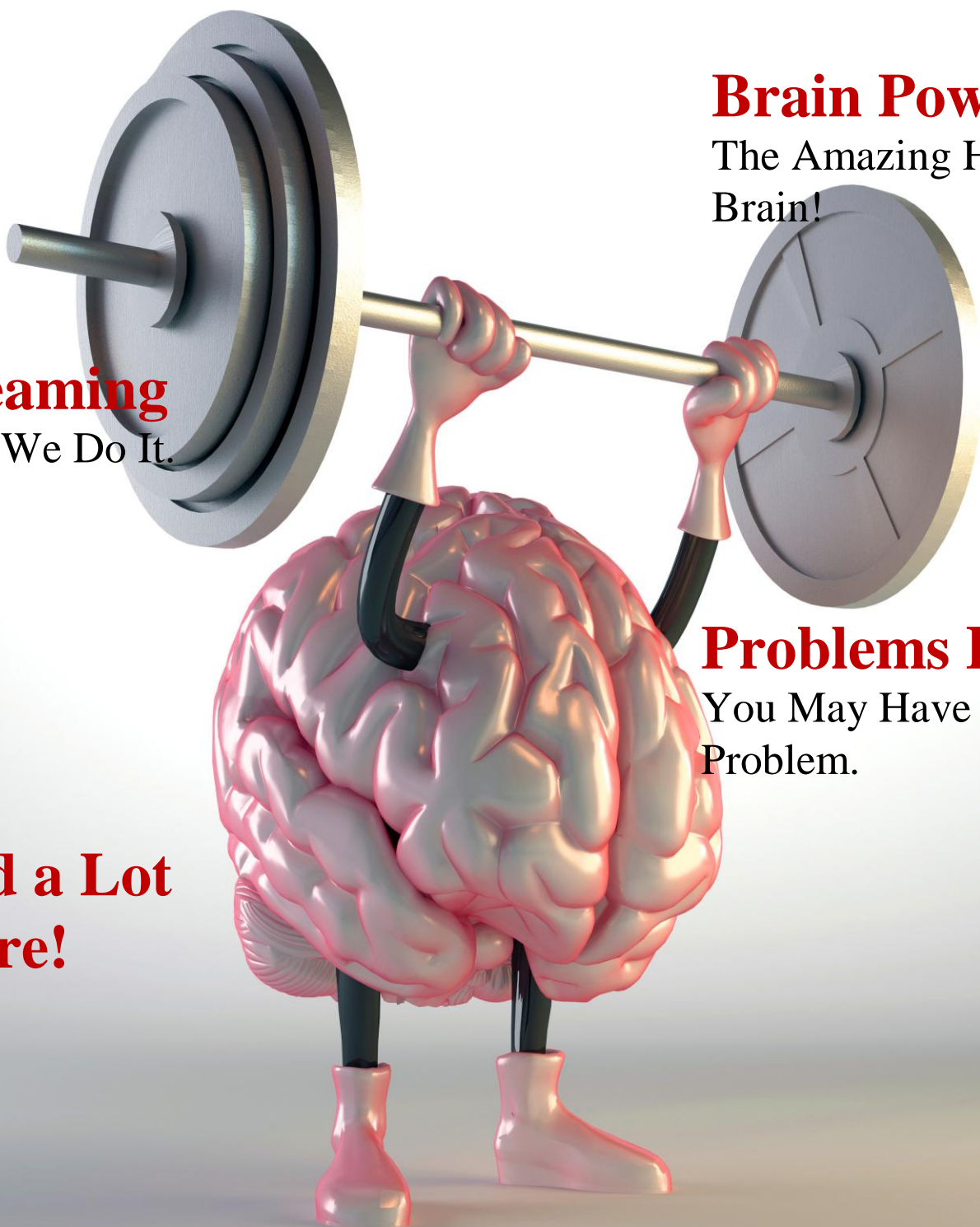
Dreaming

Why We Do It.

Problems Peeing?

You May Have a Prostate Problem.

And a Lot More!



Welcome to March edition of Sowkhya Magazine™!

In this month's edition, we decided to give our readers a quick overview of a hot topic that is currently in the news – Swine flu. The number of cases being reported is on the rise, and it is essential for us to take the right precautions to prevent the spread of this disease amongst us. However, despite our best measures, it is rather difficult to control the spread of this condition.

In order to simplify things, we have not gone into too much detail, but have instead handed you 2 posters that should make it easy for you to understand how this condition spreads and what you can do to prevent it. We hope you find this information helpful.

In addition, we have also talked about a common problem encountered in men – an enlarged prostate gland. An enlarged prostate could be due to a simple age-related phenomenon or due to cancer, so it is important to realise the importance of this gland. We have also spoken about an amazing organ in the body – the brain. Included also are tiny tidbits of information that we hope you will enjoy. As always, we look forward to your feedback and suggestions in making this magazine even better for you. Happy reading!



Dr B V Baliga
MBBS MRCP PhD MBA

Author, Sowkhya
Magazine™



Dr B G Baliga
MD FRCP FICC

Editor, Sowkhya
Magazine™

Men! Problems Passing Urine? You May Have An Enlarged Prostate.

The formation and passage of urine is a complicated process. The blood pumped from the heart reaches the kidneys where it is filtered. The result of this filtration process is urine, which is high in toxic waste products.

Once urine is produced by the kidneys, it passes through to the bladder where it is stored. When the bladder is filled up, an urge to pass urine develops. The urine is then passed out through the urethra.

The urethra is also responsible for the passage of male reproductive fluids. Along the course of the urethra lies a small round structure. This is the prostate gland. It is seen only in men, and is the size of a small walnut.

Functions of the prostate gland

The prostate gland envelops the urethra, and secretes fluids that protects and nourishes the sperm produced by the testicles. A normally functioning prostate gland is essential for procreation. However, later in life, it does not serve an important function.

Conditions affecting the prostate

As men get older, the prostate gland can get a little bigger. As is seen in the picture on the right, the prostate gland lies right below the urinary bladder, press upon the base of the bladder, making an individual want to pass urine more often. It feels like someone is squeezing the bladder every time it fills up.

A prostate gland which is enlarged due to age-related causes is called **benign prostatic hypertrophy (or BPH)**. An enlarged prostate can prevent the bladder from emptying fully. This can make the patient want to visit the toilet quite soon after passing urine. In other words, the frequency of urination increases. A significantly large prostate in men can cause difficulty in initiating urination. Despite efforts to pass urine, the process is often incomplete.

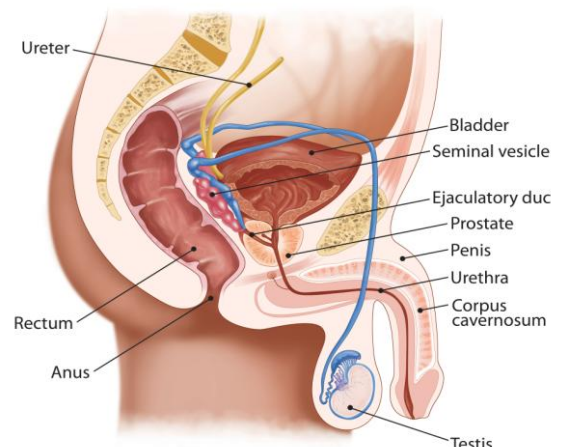
The prostate can also be affected by inflammation – a condition called **prostatitis**. This condition is easily treated with antibiotics. In rare cases, the prostate gland can be affected by cancer. **Prostate cancer** is the most common type of cancer in men, and requires aggressive treatment as it can spread to the bones.

Diagnosing prostate problems

An **ultrasound examination** can determine the size of the prostate gland and whether the enlarged prostate is obstruction to the flow of urine. A prostate scan is done with a full bladder and the scan is repeated following urination to evaluate the volume of urine left behind in the bladder. This volume can help determine the degree to which the gland is affecting the bladder function. A special blood test called **PSA (prostate specific antigen)** can help determine if there is any damage to the prostate. High levels could indicate inflammation or cancer, prompting further investigation. The prostate gland can be clinically evaluated through **digital rectal examination**, where the lubricated gloved finger of the doctor is placed in the rectum to determine the size and surface characteristics of the prostate. Tests such as a biopsy may be recommended if there is any suspicion of a tumor.

Treatment

The treatment of enlarged prostate depends on the cause. Patients with BPH may be treated medically with tablets alone. However, if the response to treatment is inadequate, further evaluation of the prostate is necessary to consider surgical treatment. Prostate cancer often requires surgical removal of the prostate (through minimally invasive techniques) along with radiation or chemotherapy.



Understanding Swine Flu

WHAT IS SWINE FLU?

Swine flu is a viral illness that is caused by the Influenza A virus. This virus is commonly called the H₁N₁ virus, though other strains such as the H₁N₂, H₃N₁, H₃N₂ and H₃N₃ are also responsible.

SPREAD



Spread between humans can occur through

- Contact with infected people
- Contact with secretions (such as saliva) of infected humans. These can spread through sneezing and coughing in close proximity.



Spread from pigs to humans is rare except in farmers and meat handlers.

Note: Swine flu is NOT transmitted by eating cooked pork.

WHO IS AT RISK?

People at risk include healthcare personnel involved in patient care, close relatives who come in contact with individuals with swine flu, children under 5 years and elderly individuals above 65 yrs. People with lung disease, diabetes and low immunity have a higher risk. Pregnant women are at a higher risk as well.

SYMPTOMS



Fever



Body Pain



Fatigue



Coughing and Sneezing

Other symptoms include breathing difficulty, headache, sore throat and muscle aches. Patients can develop these symptoms around 7 days after exposure to an infected person.

DIAGNOSIS

Swine flu virus can be detected by a throat swab or simple nasal swab.

TREATMENT

2 drugs – **Tamiflu** (Oseltamivir) and **Relenza** (Zanamavir) are currently recommended. Tamiflu is available in India and must be taken as advised by the treating physician.

VACCINE

The swine flu vaccine is available in India, and is reserved for individuals at high risk. It is currently in extreme short supply in India due to the high demand.

Influenza A(H1N1)

How to Protect Yourself and Others



Cover your nose and mouth with a disposable tissue when coughing and sneezing



Dispose of used tissues properly immediately after use



Regularly wash hands with soap and water



If you have flu-like symptoms, seek medical advice immediately



If you have flu-like symptoms, keep a distance of at least 1 meter from other people



If you have flu-like symptoms, stay home from work, school or crowded places



Avoid hugging, kissing and shaking hands when greeting



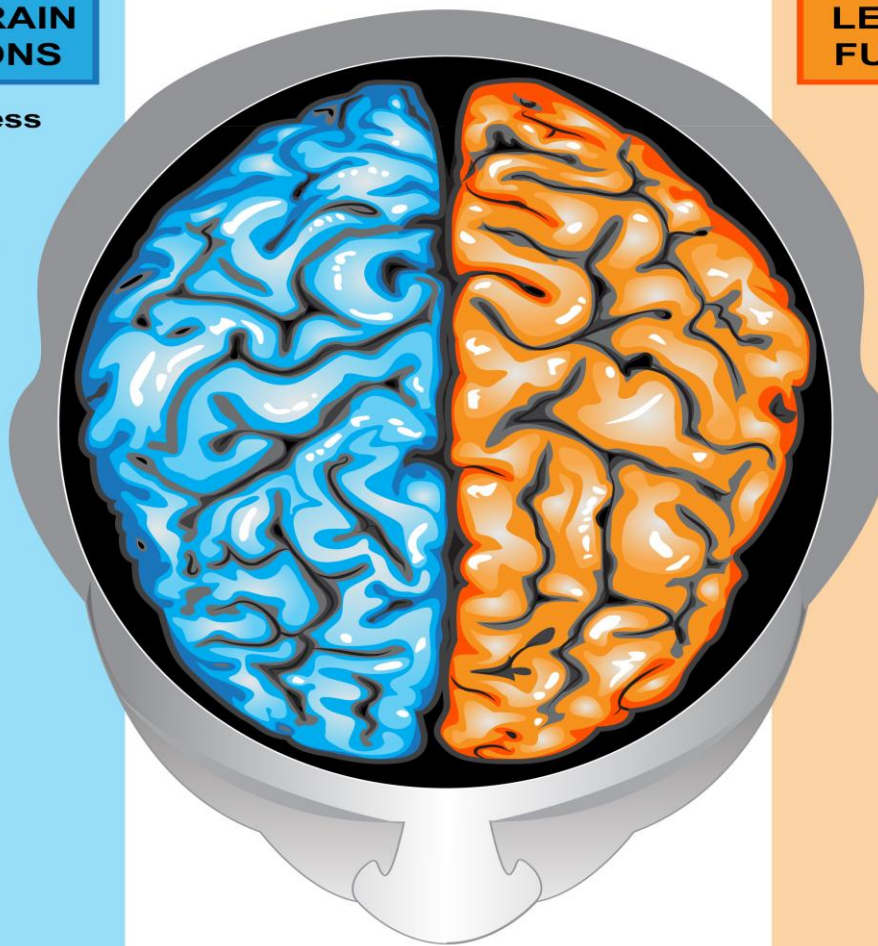
Avoid touching eyes, nose or mouth with unwashed hands

For more information:

<http://www.emro.who.int/csr/h1n1/index.htm>
<http://www.who.int/en>

RIGHT-BRAIN FUNCTIONS

Art awareness
Creativity
Imagination
Intuition
Insight
Holistic thought
Music awareness
3-D forms
Left-hand control



LEFT-BRAIN FUNCTIONS

Analytic thought
Logic
Language
Reasoning
Science and math
Written
Numbers skills
Right-hand control

The Human Brain – An Amazing Machine.

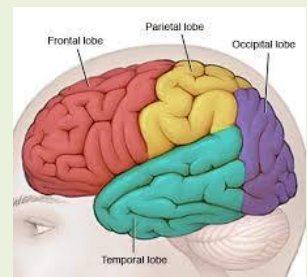
The human body is amazing, and our brain probably tops the list of what makes us amazing. The function of the entire body, starting from our walking to the way we speak, the tastes and smells we experience and the emotions we feel are all down to brain function. The brain works all the time, even when we sleep. It is tireless and relentless.

The brain is broadly divided into a left and right brain, as is seen in the picture above. Each half of the brain (called cerebral cortex) has got four lobes – the frontal lobe, parietal lobe, temporal lobe and occipital lobe. Each of these serves a different function. Within the cortex are the 'basal ganglia' - the part that helps transmit and co-ordinate messages between different parts of the brain. The base of the brain consists of the cerebellum, which is responsible for maintaining balance and co-ordination. The lower part of the brain (called brain stem) is connected to the spinal cord. Within the brain are over 100 billion nerve fibres that are connected to each other through trillions of connections called 'synapses'.

Functions

As is seen above, the left and the right halves of the brain have different functions. In a right handed individual, the left half of the brain is dominant and vice versa. However, both halves work in perfect synchrony. The different lobes of the brain serve different purposes -

- Frontal lobe – Problem solving, judgement and certain muscle functions
- Parietal lobe – Handwriting, sensation, body position
- Temporal lobe – Hearing, memory, speech
- Occipital lobe – Vision



If one were to take a closer look at the function of the brain, different parts of it control different parts of the body. This would mean that if there is damage to a particular part of the brain, a part of the body will stop functioning. Maintaining good brain health requires good blood pressure control, a healthy diet, regular exercise and constant mental exercise. New information builds new connections, which improves memory power.

Some Amazing Facts about the Human Brain

- The brain uses 20% of the blood and oxygen in the human body.
- Cutting off blood supply to the brain for 5 minutes can cause permanent damage.
- The human brain produces enough energy to power a small light bulb.
- 60% of your brain is fat tissue.
- Lack of sleep reduces brain function and impairs judgement.
- The structure of your brain changes every time you learn something new.
- Information travels within the brain at over 400 km/hour!
- When put together, the nerve fibres in the brain can go round the earth 3 times.
- Albert Einstein had a small brain! Intelligence has nothing to do with brain size.

Swine Flu Vaccine – The Who, The Why, The What.

The recent swine flu panic has spread at a rapid rate across India. With more and more individuals being affected by the condition and with the alarming numbers the media is portraying, it is not surprising that we are now getting many patients in our clinic worried that a simple cough is swine flu. One of the most common questions we are asked is 'can I get a vaccine?'

There is a vaccine available against swine flu, but unfortunately it is in very low stock in the country. People who are in real need of the vaccine are not getting it, while those who are at very low risk have managed to secure an injection. But the question is this – 'Do you really need the vaccine?'

There are no clear guidelines issued by any medical bodies as of yet in India, but the Centers for Disease Control and Prevention (CDC) currently recommend the vaccine for pregnant women, people who live in the same household as a child under the age of 6 months with swine flu, healthcare workers (doctors and nurses), children over 6 months of age and older individuals who have pre-existing lung, heart, liver and kidney disease. The Indian Medical Association (IMA) has clearly stated that the death rate is actually higher with the normal flu than with swine flu, so there is no need to panic.

There are 2 different forms of the vaccine – the live vaccine and the inactivated vaccine. The live vaccine can be given to individuals between the ages of 2 to 49 years, but not to pregnant women. However, the inactivated vaccine seems to be used a lot more here. The currently available vaccine in India is 'Vaxigrip' – sterile suspension of influenza virus that is administered through injection into the muscle or deep under the skin.

The vaccine takes around 2 to 3 weeks to start exerting its effects, and the immunity lasts between 6 – 12 months. The swine flu virus is often rampant during winter months, and rarely spreads in the summer months due to the higher temperatures.

Are there any risks?

Yes, there are certain risks with the vaccine, though they are rare. Patients who have an allergy to egg or meat protein may develop a severe allergic reaction to the vaccine. A nerve condition called Guillian Barre syndrome has been reported, and although rare is seen in patients who have had this syndrome following the regular flu vaccine. The vaccine may interact with anti-seizure medication and reduce their effectiveness.

If you are looking to obtain the swine flu vaccine, make sure you see your physician to ensure it is safe for you.

Dreaming – Why Do We Do It?

Dreams have been defined as a 'succession of images, ideas, emotions and sensations that occur involuntarily in the mind during different stages of our sleep'. For many years, it was believed that dreaming was a method of the spirit world to act through us, until Aristotle and Plato clarified that it was a way for the unconscious mind to play out desires in a safe environment.

Despite research, it is still unclear why we dream. Some believe that it occurs in a stage of our sleep (called rapid eye movement sleep, or REM sleep) where the brain is as active as it would be during waking hours. Some state that dreaming helps to deal with changes in emotions, solves certain problems and can help build memories. The dreams that we have in our sleep rarely come true (contrary to popular belief), but of course, some dreams can be fun and sometimes hilarious. There is no answer yet, but until we have one, let's keep dreaming!

Swine Flu Vaccine – Who Should Take It?

1. Individuals between 6 months to 4 years
2. People over the age of 50 yrs at high risk
3. People with a history of lung disease such as asthma, heart disease (except high blood pressure), kidney disease, liver disease and nerve diseases, along with diabetes.
4. Individuals with low immunity (HIV, Cancer)
5. Individuals with long term illnesses
6. Pregnant women in the flu season
7. Individuals in contact with patients with proven swine flu such as household contacts and caregivers.

Always consult your doctor if in doubt.

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You cannot believe in God until you believe in yourself.

- Swami Vivekananda