Virtual Interactive Session With Dr. Nandini Padte

On the 1st of December, 2020, we the students of Mushtifund Aryaans Higher Secondary School had a golden opportunity to interact with the first female orthopaedic surgeon Goa has produced, an ex-student of Aryaan's itself, Dr. Nandini Padte.

Dr. Padte finished her MBBS in 2013 (in Goa Medical College) and achieved her MS degree in orthopaedics in 2017. She is Goa's first female orthopaedic surgeon. She attained a fellowship in shoulder and knee arthroscopy and arthroplasty from a famous hospital in the city of Mumbai.

During her student years, Ma'am secured the highest marks in MS Orthopaedics, she won a gold medal in surgery in her final MBBS. She also won a gold medal for physiology in her first MBBS. Dr. Padte was felicitated by the Indian Medical Association (IMA), for being the first female Orthopaedic surgeon from Goa. She also won a gold medal for academic excellence in the year 2017.

Apart from academics, Ma'am also participated in lot of extra-curricular activities. She has a black belt in Karate. She had a passion for swimming, and she swam across the River Mandovi when she was only 8 years old. She also practiced the classical dance, Bharatnatyam for a span of about 7 years.

Ma'am began the session by discussing some common problems being faced by the general public (young students in particular) during these trying times of Covid-19. This pandemic has had a profound impact on student's lives. They have to attend classes online, sitting in front of a screen for at least a minimum of 5 hours. This has resulted in health problems and Dr. Padte explained exactly what these problems are, and how they can be avoided.

Cervical Spondylosis

This disease entails basic wear and tear of our cervical vertebrae (which are 7 in number) in the neck region. It is usually prevalent in older individuals, but in this Era of Online Classes, there have been several cases of young teenagers and children suffering from neck pain.

Our spinal cord passes through the neural canal, and the nerves exiting from the spinal cord go through the neural foramina. Between 2 vertebrae, there are discs called intervertebral discs which provide cushioning in order to prevent sudden shock/jerk of the spinal cord. With age, the fluid inside the disc comes out, bulges and it presses on the surrounding structures. Hence, the intervertebral disc flattens.

This has many implications. The common complaints are:

- Neck Pain
- Stiffness
- Numbness/ Tingling in Arm
- Headaches
- Vertigo (sometimes)

Cervical Spondylosis Pain Treatment

Disk
Nerve
Vertebra
Narrowed disk

The diagnosis for spondylosis is by: X-rays and/or CT-Scan.

"MORE IMPORTANT THAN TREATMENT IS PREVENTION"

--- if the health problem can be prevented in the first place, then that is much more important and significant than treatment later.

General Advice given by Ma'am to avoid/reduce Neck Pain:

While sitting, ensure that the neck and the spine are properly aligned. Don't lean
forward, as this increases the moment arm between our vertebrae and head, thus our
head effectively weighs more (for every centimetre we lean forward, our head weighs
10 pounds more!) and causes strain on our neck. That's why we have to sit straight,

with our heads back, back touching the chair (parallel to the chair), thighs parallel to the floor and feet touching the ground.

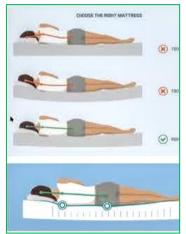
 Ergonomics has become very famous now. It is the study of people's efficiency in their working environment. It has become famous because desk jobs are many. So an ergonomic



chair is an ideal chair which helps us sit in a proper posture as indicated in this figure. There can also be a slightly stiff pillow between the chair and the back, so there is

lesser stress/pain.

Now, for the sleeping posture. We have to make a conscious effort to use a stiffer mattress and not a soft one. We should use a moderately stiff pillow so that our neck and spine are at the same level while we are sleeping. As indicated in the adjoining figure, the picture at the bottom-most part indicates correct sleeping posture.



Dr. Padte also stressed on the importance of physical exercise in today's world. We have to stay active. The students must engage in small-small exercises between study sessions and the elders must also go for walks, etc, to keep the body healthy. After all, the human body was designed to do work.

If the neck pain is in mild form, then the patient can take muscle relaxants, antiinflammatory tablets and painkillers to suppress the pain and can also engage in physiotherapy exercises.

If it gets too serious, then Ma'am told us that a procedure is conducted wherein; a steroid is injected into the nerve sheath of the nerve which is getting compressed

(under continuous X-ray vision) so that it reduces the inflammation and relieves the pain.

After imparting us so much knowledge on spondylosis and the ways to prevent it, Ma'am touched upon her experiences during her student years.

She said that 11th and 12th Standard were the best academic years of her life, At ARYAANS, the mind of the student is stimulated so much, and complemented by the best teaching faculty, the student really excels in his/her life.

Then Ma'am told us about the basic MBBS course. It is a 5 year course, with 3rd MBBS being the longest term of 2 years. She told us that MBBS is such a course, where the matter we learn on the first day, we have to remember that matter right upto the last day of MBBS and then later on as well, as a practitioner.

When Ma'am was asked for tips on how to study the large volumes of matter in MBBS, she told us that out of her experience, drawing charts and drawing diagrams really helped her get a feel of the subject and memorise the matter efficiently.

When Ma'am was asked about how far dissections help in understanding the subject, she replied saying that dissections give a hands-on experience of the subject, as well as give a practical knowledge of it. She said that in GMC, she got a lot of practice by dissecting human bodies during 1st MBBS. Also, as a 1st year Junior Resident (after MBBS) Ma'am told us that she already began operating on people. This made her very confident.

Dr. Padte told us that Orthopaedic surgery is not taken up by women (statistically). She said that 0.5% of all orthopaedic surgeons are females in India (1 in every 200 orthopaedic surgeons is a female). She told us that she had always wanted to take Ortho, that's why she listened to her heart and went ahead with Ortho. In this journey of decision making, she also said that her parents were very supportive and encouraged her when she finally decided.

Ma'am told us that during Covid-19 times, it has become difficult for people to go for walks outside, but this can cause a deficiency of Vitamin-D in their bodies, especially for vegetarians, who don't eat foods with Vitamin-D. So she suggested that vegetarians must take Vitamin-D as well as other multivitamin supplements in order to remain fit and healthy.

When a student asked Dr. Padte what arthroscopy is, she replied by saying that it is the putting of a thin, slender scope in almost any joint of the body through a keyhole incision in the skin. This provides a 3-D orientation of the joint which serves for better vision and treatment.

Ma'am also gave us a basic insight into other health problems such as tennis elbow, wherein the point where the muscle inserts into the bone, gets inflamed. This causes severe pain while doing activities like turning a door-knob or a bottle cap. She also told us about knee replacement surgery. She said that younger patients, who have knee pain, should prolong the need for knee replacement as much as possible as the artificial knee only has a life of about 10-15 years, and operating on the artificial knee is even more difficult as the surgery is more complex. That being said, if the young patient says that they can't handle the pain at all, then the surgeons will go ahead with knee replacement, because the final decision for surgery always lies with the patient and not the doctor.

Dr. Padte told us that during the course of her practice as well as during the course of practice of every doctor, there have been unsuccessful surgeries and complications. Sometimes, even though the doctor gives his/her level-best, something may go wrong. That is why the doctor has to be mentally very tough. They will feel a partial guilt feeling, but they must not feel depressed. They have to forget about it and concentrate on the next case which comes to them.

Thus came to an end, a very informative interactive session. Along with Cervical Spondylosis, Neck Pain and other health problems, we also came to know about the MBBS and MS course, as well as we learnt about the job of an orthopaedic surgeon.

At the end of the session, Shravani Waigaonkar, a student of 12th Standard, summed up the session and proposed the vote of thanks on behalf of the institution.

I would like to take this opportunity to thank our Mentor and Director, Sir Vyankatesh Prabhudessai for organising such an amazing talk for us, which really gave us a lot of knowledge into the medical field.

Also, I would like to thank Dr. Nandini Padte, for taking time out of her busy schedule and having this interactive session with us. The presentation, mixed with the explanations given by Ma'am was really fantastic. All the students really enjoyed the session and were also able to take home, very important points on how to avoid neck pain, and other health problems.

Written by: Anmol Bhat 11th Regular MAHSS Student.

Pic credits: ALL THE PICTURES USED IN THIS REPORT, WERE TAKEN FROM DR. NANDINI PADTE'S PRESENTATION ITSELF.