

CRANIAL NERVE I - OLFACTORY NERVE

Mary had a brain injury six months ago. Her smell has been affected.



**STROKE SERIES
VOLUME 2**

**CRANIAL NERVE
ASSESSMENT**



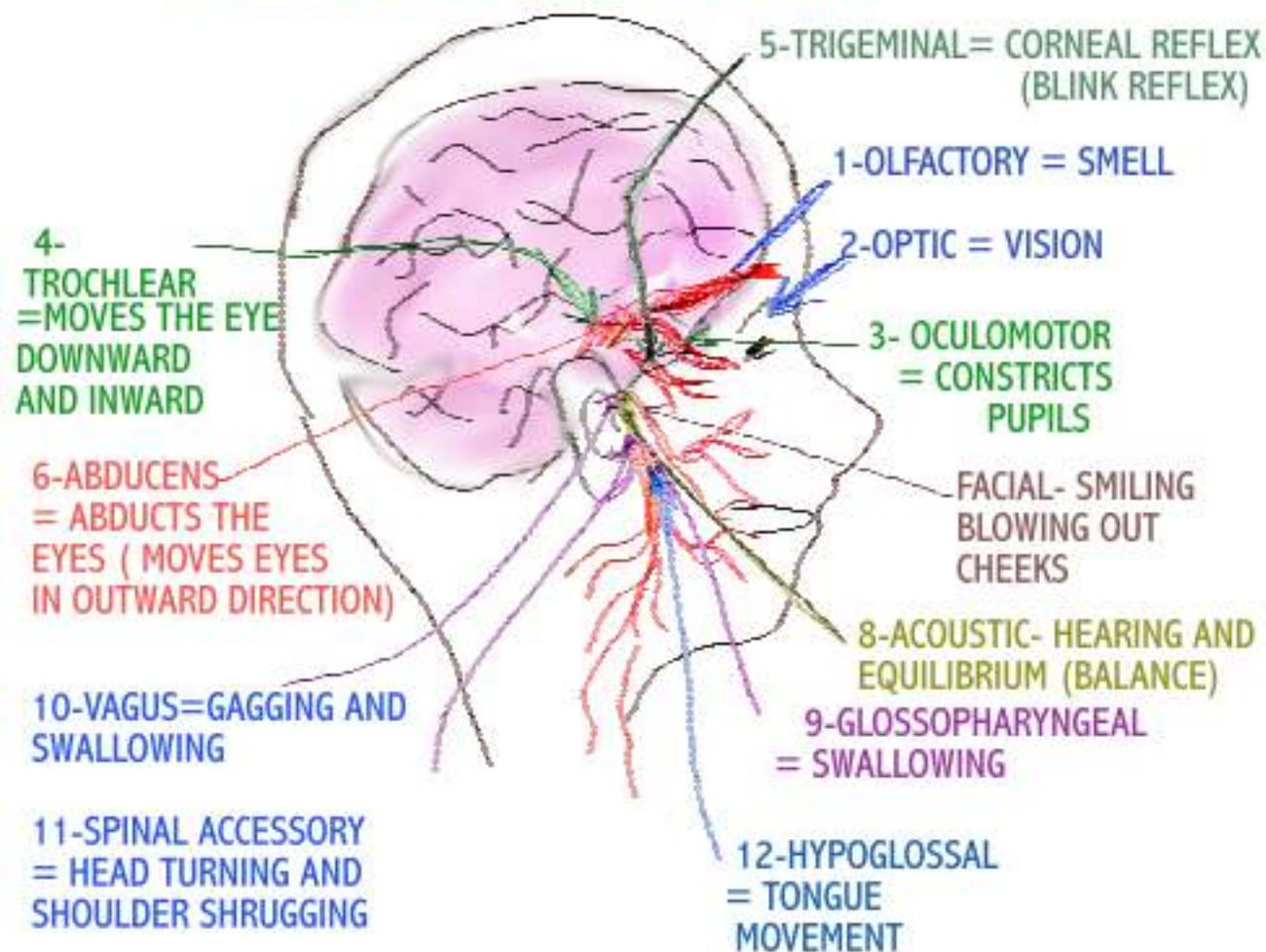
**RED
ALERT!**

The subject matter is intended to share over 3 decades of **CLINICAL EXPERIENCE** with new nurses and those who need experience in a particular area. It is by no means intended as a substitute for your Institution's Policies and Procedures. Follow your doctor's orders .

This is a step by step approach which is full of humor and meant to make learning enjoyable.

CRANIAL NERVES (SIMPLIFIED)

EACH BRAIN HAS 12 PAIRS OF CRANIAL NERVES



CRANIAL NERVE ASSESSMENT

THE CRANIAL NERVES ARE A VERY USEFUL TOOL IN DOING A NEUROLOGICAL ASSESSMENT. THERE ARE SIMPLE WAYS TO RELATE TO MAKING THE BEST USE OF THESE NERVES. THE GOAL OF THE FOLLOWING SIMPLE EXPLANATIONS IS TO MAKE LEARNING EASY AND EFFECTIVE.

PLEASE NOTE THE CONTENTS OF THIS PROGRAM IS IN NO WAY INTENDED AS A SUBSTITUTE FOR YOUR INSTITUTION'S POLICIES AND PROCEDURES OR YOUR DOCTOR'S INSTRUCTIONS.

LEARNING OBJECTIVES:

- RECOGNIZE THE 12 PAIRS OF CRANIAL NERVES
- IDENTIFY THE CORRECT USE OF EACH NERVE
- RELATE SYMPTOMS CAUSED BY INJURY OR DAMAGE TO THE CRANIAL NERVES

CRANIAL NERVE I - OLFACTORY NERVE

Mary had a brain injury six months ago. Her smell has been affected.



CRANIAL NERVE 2 - OPTIC - RESPONSIBLE FOR VISION

Sara had a pituitary resection for a brain tumor. Her eyes are being checked for visual deficits.



SARA HAS DOUBLE VISION. DIPLOPIA IS THE TERM USED FOR DOUBLE VISION.

CRANIAL NERVE -3 OCULOMOTOR NERVE

Sara had a pituitary resection for a brain tumor.

THE OCULOMOTOR NERVE IS RESPONSIBLE FOR CONSTRICTION OF THE PUPIL WHEN LIGHT IS SHONE INTO THE EYE. BOTH PUPILS NORMALLY CONSTRICT AT THE SAME TIME, REGARDLESS OF WHICH EYE THE LIGHT IS SHONE INTO.



CRANIAL NERVE -3 (OCULOMOTOR)
CONSTRICTS THE PUPILS WHEN LIGHT
IS SHONE INTO THE EYES



CRANIAL NERVE- 4
(TROCHLEAR) MOVES EYES
DOWNWARD
AND
INWARD



CRANIAL NERVE-6
(ABDUCENS)
ABDUCTS EYES



CRANIAL NERVES 3,4 AND 6 ARE RESPONSIBLE FOR
EXTRAOCULAR EYE MOVEMENT. ALL THREE PAIRS OF
NERVES WORK TOGETHER TO CREATE SMOOTH
MOVEMENT OF THE EYE MUSCLES. THEY ARE
GENERALLY CHECKED TOGETHER.

CRANIAL NERVE -5 LARGEST OF THE CRANIAL NERVES



WHAT SEEMS TO BE
THE MATTER MRS.
SMITH?

WELL DOCTOR,
SOMETHING FLEW
INTO MY EYE
TWO DAYS AGO
AND I DID NOT EVEN
FEEL
ANYTHING

MRS. SMITH WAS INVOLVED IN A CAR ACCIDENT ABOUT
A MONTH AGO. SHE IS ALSO HAVING TROUBLE
WITH CHEWING HER FOOD AND MOVING HER LOWER JAW.



OPHTHALMIC BRANCH

CORNEAL (BLINK) REFLEX

MAXILLARY BRANCH- SUPPLIES THE UPPER JAW

MANDIBULAR BRANCH - SUPPLIES THE LOWER JAW

CRANIAL NERVE -7, THE FACIAL NERVE

THIS NERVE IS CHECKED BY ASKING THE PATIENT TO SMILE, OR BY BLOWING THE CHEEKS OUT.



BLOWING
OUT
CHEEKS



CRANIAL NERVES 5 (TRIGEMINAL) AND 7 (FACIAL) ARE GENERALLY CHECKED TOGETHER.

CRANIAL NERVE

CRANIAL NERVE- 8 ACOUSTIC



DOCTOR I HAVE A STRANGE NOISE IN MY LEFT EAR AND I FEEL DIZZY AND NAUSEOUS WHEN I STAND UP.



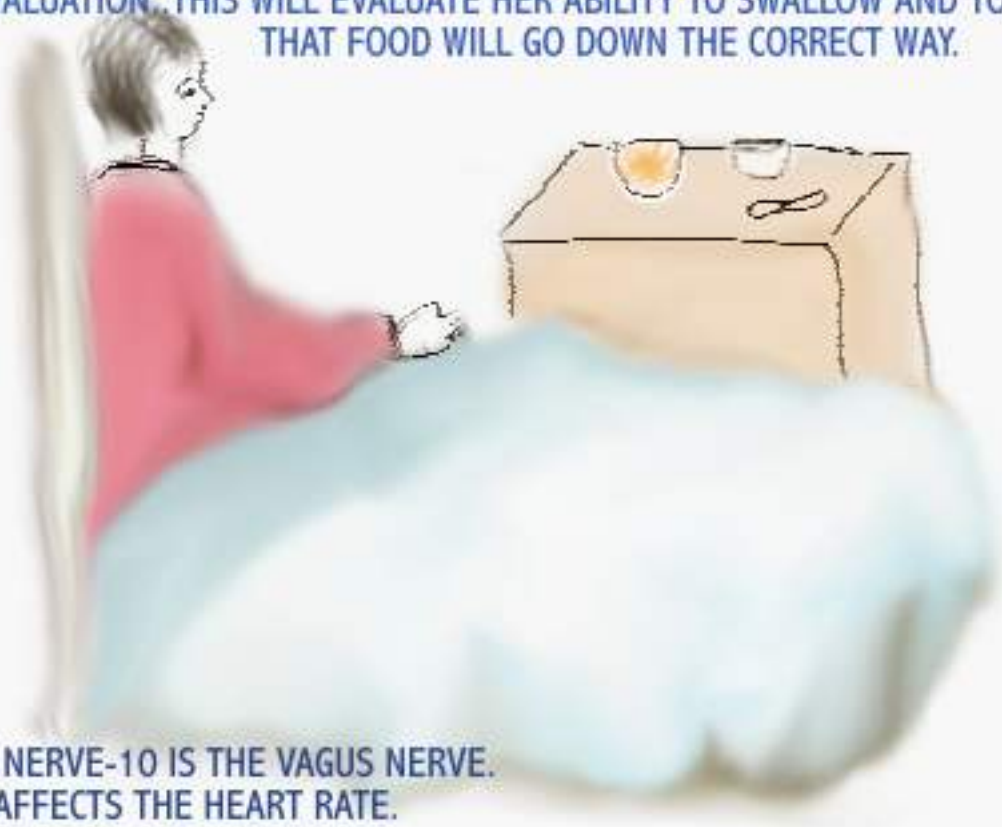
CRANIAL NERVE 8 (ACOUSTIC) IS RESPONSIBLE FOR HEARING AND BALANCE OR EQUILIBRIUM

MRS.J HAS AN ACOUSTIC NEUROMA, SHE NOTICES HEARING AND BALANCE PROBLEMS. HER DOCTOR CHECKS THE PROBLEM.

CRANIAL NERVE - 9 GLOSSOPHARYNGEAL CRANIAL NERVE -10 VAGUS

THESE TWO CRANIAL NERVES ARE USUALLY CHECKED TOGETHER. PATIENTS WHO HAVE BRAIN INJURIES INCLUDING STROKE, MAY HAVE DIFFICULTY SWALLOWING OR GAGGING WHEN FOOD GOES THE WRONG WAY.

MRS.S HAD A STROKE.SHE IS AWAITING A TEST KNOWN AS A SWALLOWING EVALUATION. THIS WILL EVALUATE HER ABILITY TO SWALLOW AND TO ENSURE THAT FOOD WILL GO DOWN THE CORRECT WAY.



CRANIAL NERVE-10 IS THE VAGUS NERVE.
IT ALSO AFFECTS THE HEART RATE.

CRANIAL NERVE-11 SPINAL ACCESSORY



THE SPINAL ACCESSORY NERVE MOVES MUSCLES IN THE NECK. DAMAGE TO THIS MUSCLE MAY RESULT FROM TRAUMA OR PROCEDURES TO THE HEAD OR NECK. TURNING THE HEAD OR MOVING THE SHOULDERS UP AND DOWN MAY BE DIFFICULT, DUE TO INJURY.

CRANIAL NERVE -12 HYPOGLOSSAL



ANN IS HAVING HER CRANIAL NERVE -12 CHECKED. IF THERE IS DAMAGE, THE TONGUE WILL LEAN TOWARDS THE WEAK SIDE.

DEAR NURSES,

HOPE YOU WERE ABLE TO BENEFIT FROM
THE SIMPLE EXPLANATIONS FOR THE
CRANIAL NERVES ASSESSMENT.
PLEASE CONTINUE ON TO "STROKE SERIES,
VOLUME 3".
"ACCURATE NEUROLOGICAL ASSESSMENT".

ENJOY LEARNING!

