OIANs of all the muscles

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1 Muscles of the back

1.1 Suboccipitals

- Rectus capitis posterior major
- Rectus Capitis Posterior Minor
- Obliquus capitis superior
- Obliquus capitis inferior

Table 1: Suboccipital muscle group

Muscle	Origin	Insertion	Nerve	Action
Rectus Capitis Posterior Major	C2 (SP)	Occipital bone (inferior nuchal line, middle third)	Suboccipital N.	BIL: Extend head; UNIL: I/L head rotation
Rectus Capitis Posterior Minor	C1 (posterior tubercle)	Occipital bone (inferior nuchal line, inner $1/3$)	Suboccipital N.	BIL: Extend head; UNIL: I/L head rotation

Muscle	Origin	Insertion	Nerve	Action
Obliquus Capitis Superior	C1 (TP)	Occipital bone (inferior nuchal line, middle third	Suboccipital N.	BIL: Extend head; UNIL: I/L SB, C/L rotation
Obliquus Capitis Inferior	C2 (SP)	C1 TP	Suboccipital N.	BIL: Extend head; UNIL: I/L rotation

1.2 Prevertebral Muscles

- Longus capitis
- Longus Colli Cervicis
- Rectus Capitis anterior
- Rectus Capitis Lateralis

Table 2: Prevertebral muscle group

Muscle	Origin	Insertion	Nerve	Action
Longus Capitis	C3-C6 (TP, ant	Occipital bone	Direct	BIL flexes
	tubercles)	(basilar part)	branches	head; \mathbf{UNIL}
			from cervical	flexes and
			plexus	slight I/L
			(C1-C3)	rotation
Longus colli	Vertical part:	Vertical part:	Direct	BIL : Flex AO
cervicis	C5-T3 (ant side of	C2-C4 (ant sides of	branches	Joint; UNIL :
	vertebral body);	vertebral bodies);	from cervical	Lat flex at AO
	Sup-oblique	Sup-oblique C1	plexus	joint
	C3-C5 (TP, Ant	(TP, ant tubercle)	(C2-C6)	
	tubercle)	Inf-Oblique:		
	Inf-Oblique:	C5-C6 (TP, Ant		
	T1-T3 (ant side of vertebral body)	tubercles)		
Rectus Capitis	C1 (lateral mass)	Occipital bone	C1 Ant	BIL : flex AO
Anterior	•	(basilar part)	ramus	Joint; UNIL:
				Lateral
				Flexion of AO
				joint

Muscle	Origin	Insertion	Nerve	Action
Rectus Capitis Lateralis	C1 (TP)	Occipital bone (basilar part, lateral to occipital condyles)	C1 Anterior Ramus	BIL: flex AO Joint; UNIL: Lateral Flexion of AO joint

1.3 Superficial intrinsic back Muscles

- Serratus posterior superior
- Serratus posterior inferior
- Splenius capitis
- Splenius cervicis

Table 3: Superficial intrinsic back Muscles OIANs

Muscle	Origin	Insertion	Nerve	Action
Serratus Posterior Superior	Nuchal ligament, C7-T3 SP	2-4th ribs (sup border)	Spinal nn. T2-T5 (Ant ramus)	Elevates ribs
Serratus Posterior Inferior	T11-L2 (SP)	8-12th ribs (inferior borders near angles)	Spinal nn. T9-T12 (Anterior rami)	Depresses ribs
Splenius Capitis	Nuchal ligament, - C7-T3/T4 SP	Lateral 1/3 nuchal line (occipital bone), Mastoid process (temporal bone)	spinal nn. C1-C6 (Post rami, lateral branches)	BIL: Extends C/S and head; UNIL: I/L head SB and Rotation
Splenius Cervicis	T3-T6/T7 (SP)	C1–C3/4 (TP)	Spinal nn. C1-C6 (Post rami, lateral branches)	BIL: Extends C/S and head; UNIL: I/L head SB and Rotation

1.4 Intermediate intrinsic back muscles (Erector Spinae)

- Iliocostalis
 - Iliocostalis Cervicis

- Iliocostalis Thoracis
- Iliocostalis lumborum

• Longissimus

- Longissimus Capitis
- Longissimus Cervicis
- Longissimus Thoracis

• Spinalis

- Spinalis CervicisSpinalis Thoracis

Table 4: Erector Spinae OIAN

Muscle	Origin	Insertion	Nerve	Action
Iliocostalis cervicis	3rd-7th ribs	C4-C6 TP	Spinal nn. C8-L1 (Post rami, lateral branches)	BIL: Extends spine; UNIL: I/L spine lat-flexion
Iliocostalis thoracis	7-12th ribs	1st-6th ribs	Spinal nn. C8-L1 (Post rami, lateral branches)	BIL: Extends spine; UNIL: I/L spine lat-flexion
Iliocostalis lumborum	Sacrum, iliac crest, lumbar vertebrae SP; lower thoracic vertebrae TP	6-12th ribs, thoracolumbar fascia (posterior layer), upper lumbar vertebrae (TP)	Spinal nn. C8-L1 (Post rami, lateral branches)	BIL: Extends spine; UNIL: I/L spine lat-flexion
Longissimus Capitis	T1-T3 (TP), C4-C7 (TP & articular process)	Temporal bone (Mastoid process)	Spinal nn. C1-L5 (Post rami, lateral branches)	BIL: Extends head; UNIL: Flexes and I/L rotation
Longissimus Cervicis	T1-T6 (TP)	C2-C5 (TP)	Spinal nn. C1-L5 (Post rami, lateral branches)	BIL: Extends spine; UNIL: I/L SB
Longissimus Thoracis	Sacrum; Iliac crest; Lumbar vertebrae (SP); Lower thoracic vertebrae (TP)	2nd-12th ribs; Thoracic & Lumbar vertebrae (TP)	Spinal nn. C1-L5 (Post rami, lateral branches)	BIL: Extends spine; UNIL: I/L SB

Muscle	Origin	Insertion	Nerve	Action
Spinalis Cervicis	C5-T2 (SP)	C2-C5 (SP)	Spinal nn. (Posterior Rami)	BIL: Extends C/S and T/S; UNIL: I/L SB cervical and thoracic spine
Spinalis Thoracis	T10-L3 (SP, lat surface)	T2-T8 (SP, lat surface)	Spinal nn. (Posterior Rami)	BIL: Extends C/S and T/S; UNIL: I/L SB cervical and thoracic spine