MYOFASCIAL MIMICRY OF NERVE ROOT, FACET & VISCERAL PAIN IN LOWER BACK PAIN DIAGNOSIS

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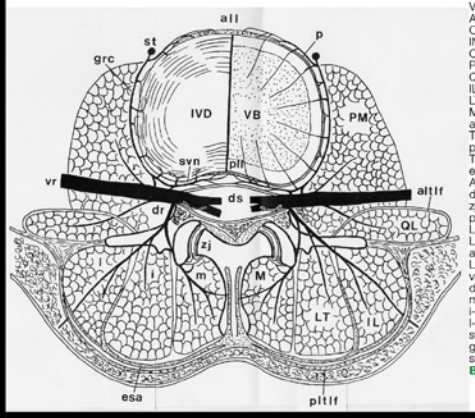
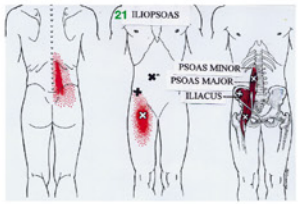
INNERVATION OF THE LUMBAR SPINE



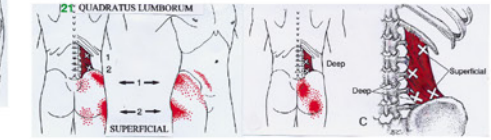
1 A CROSS SECTIONAL VIEW INCORPORATING THE LEVEL OF THE VERTEBRAL BODY (VB) AND ITS PERIOSTEUM (p) ON THE RIGHT AND THE INTERVERTEBRAL DISC (IVD) ON THE LEFT.
PM-PSOAS MAJOR
QL-QUADRATUS LUMBORUM
IL-ILIOCOSTALIS LUMBORUM
LT-LONGISSIMUS THORACIS
M-MULTIFIDUS
altlf-ANTERIOR LAYER OF THORACOLUMBAR FASCIA
pltlf-POSTERIOR LAYER OF THORACOLUMBAR FASCIA
esa-ERECTOR SPINAE APONEUROSIS
ds-DURAL SAC
zj-ZYGAPOPHYSIAL JOINT
pll-POSTERIOR LONGITUDINAL LIGAMENT
all-ANTERIOR LONGITUDINAL LIGAMENT
vr-VENTRAL RAMUS
dr-DORSAL RAMUS
m-MEDICAL BRANCH
i-INTERMEDIATE BRANCH
l-LATERAL BRANCH
svn-SINUVERTEBRAL NERVE
grc-GREY RAMUS COMMUNICANS
st-SYMPATHETIC TRUNK
Bogduk, 2005

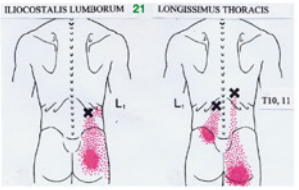
MYOFASCIAL PAIN trigger points

black **x** / white **x** demonstrate trigger points
red stipple: myofascial pain referral zone

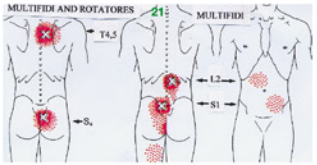


4, 15, 21 PAIN REFERRED FROM MYOFACIAL TRIGGER POINTS DOES NOT FOLLOW A SIMPLE SEGMENTAL PATTERN, NEITHER DOES IT FOLLOW FAMILIAR NEUROLOGICAL PATTERNS, NOR THE KNOWN PATTERNS FOR REFERRED PAIN OF VISCERAL ORIGIN. MYOFASCIAL PAIN FREQUENTLY BUT NOT ALWAYS OCCURS WITHIN THE SAME DERMOTOME, MYOTOME OR SCLEROTOME AS THAT OF THE TRIGGER POINT, BUT DOES NOT INCLUDE THE ENTIRE SEGMENT – IT OFTEN INCLUDES PARTS OF ADDITIONAL SEGMENTS.





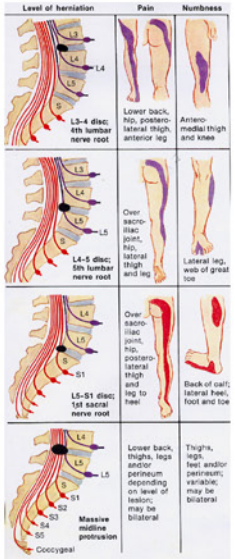
21, 22 INTENSITY VARYING FROM LOWGRADE DISCOMFORT TO SEVERE AND INCAPACITATING TORTURE, OCCURING AT REST OR ONLY ON MOTION. THE REFERRED PAIN OF MYOFASCIAL TRIGGER POINTS USUALLY IS DULL AND ACHING, OFTEN DEEP.



NERVE ROOT PAIN

NO CLEAR RELATIONSHIP BETWEEN EXTENT OF DISC PROTRUSION AND DEGREE OF CLINICAL SYMPTOMS

10 PAIN: SHARP, DULL, PAROXYSMAL, THERMAL AND ACCOM. BY PARESTHESIA



22 ADDUCTOR LONGUS MUSCLE

MYOFASCIAL MIMIC OF L 3-4 DISC LESION: ADDUCTOR LONGUS MUSCLE

22 GLUTEUS MINIMUS MUSCLE

MYOFASCIAL MIMIC OF L 4-5 OR L5-S1 DISC LESION: GLUTEUS MINIMUS MUSCLE

JOINT PAIN

SACROILIAC

17 ASYMPTOMATIC SUBJECTS

FACET-zygapophyseal

2 SYMPTOMATIC SUBJECTS

2 LUMBAR DORSAL RAMUS SYNDROME

PAIN IS "DEEP DULL ACHING, HARD TO ESCAPE, DIFFICULT TO LOCALIZE", DOES NOT FOLLOW ANY RELIABLY CONSTANT SEGMENTAL PATTERN OF DISTRIBUTION

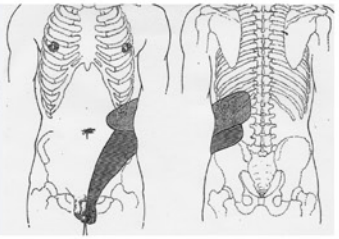
5, 6, 18, 19 SI - VARIABLE DISTRIBUTION OF PAIN "THE INNERVATION OF THE SI JOINT IS CONTROVERSIAL AND NOT GENERALLY AGREED" Grays Anatomy 2005

MYOFASCIAL MIMIC OF SACROILLIAC AND FACET JOINT PAIN: SEE: MULTIFIDI, ILIOCOSTALIS LUMBORUM, LONGISSIMUS THORACIS, ILIOPSOAS MUSCLES (right)

VISCERAL PAIN

21 EXTERNAL OBLIQUE MUSCLE

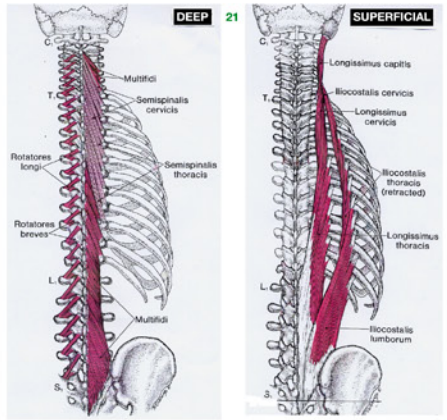
20 VISCERAL PAIN: A SINGLE EXAMPLE THEREOF, REFERRED FROM KIDNEY (dotted) AND URETER (shaded)



MYOFASCIAL MIMIC OF VISCERAL PAIN i.e. KIDNEY, URETER: EXTERNAL OBLIQUE MUSCLE

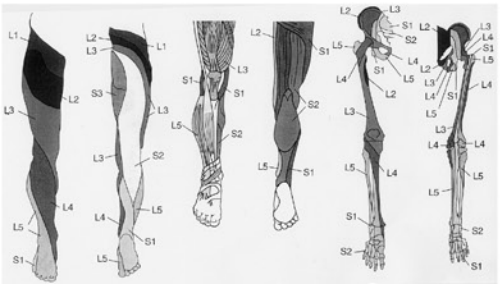
PAIN: DEEP AND DIFFUSE, POOR AND UNRELIABLE LOCALIZATION, POOR CORRELATION BETWEEN AMOUNT OF VISCERAL PATHOLOGY AND INTENSITY OF PAIN

spinal muscles

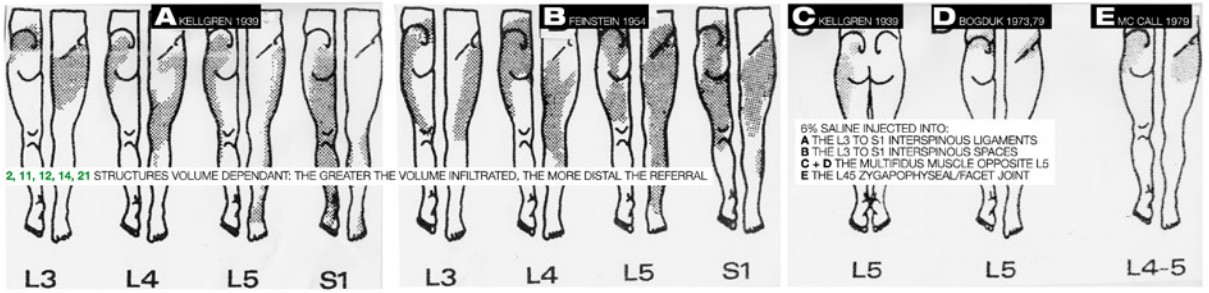


NORMAL ANATOMY

DERMATOME **MYOTOME** **SCLEROTOME**



ASYMPTOMATIC SUBJECTS



2, 11, 12, 14, 21 STRUCTURES VOLUME DEPENDANT: THE GREATER THE VOLUME INFILTRATED, THE MORE DISTAL THE REFERRAL

POSTER TITLE:
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