

SPINA BIFIDA AND ORTHOPAEDICS

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SPINA BIFIDA AND ORTHOPAEDICS

DEFINITION OF AN ORTHOPAEDIC SURGEON

STRONG AS AN OX AND TWICE AS SMART!

SPINA BIFIDA AND ORTHOPAEDICS

FUNCTIONAL LEVELS X GAIT PROGNOSIS

THORACIC

NO POWER

HIGH LUMBAR

Hip Flx + Add + Quad

LOW LUMBAR

Hams + T. Ant

SACRAL

Triceps + Hip Abd

SPINA BIFIDA AND ORTHOPAEDICS

FUNCTIONAL LEVELS X PROGNOSIS

“ALL GOING WELL”

SPINA BIFIDA AND ORTHOPAEDICS

FUNCTIONAL LEVELS X PROGNOSIS

THORACIC	COMFORTABLE SITTING
HIGH LUMBAR	“WALKS” UP TO 10 YO, THEN COMFORTABLE SITTING
LOW LUMBAR	WALKS AFOs + CRUTCHES
SACRAL	AFOs +/- CRUTCHES

SPINA BIFIDA AND ORTHOPAEDICS

WHAT CAN GO “WRONG”?

THORACIC

KYPHOSCOLIOSIS

HIP ABDUCTION CONTRACTURES

KNEE FLEXION DEFORMITIES

PRESSURE SORES

TETHERED CORD SYNDROME

SPINA BIFIDA AND ORTHOPAEDICS

WHAT CAN GO “WRONG”?

HIGH LUMBAR

KYPHOSCOLIOSIS

HIP FLEXION ADDUCTION CONTRACTURES

KNEE EXTENSION DEFORMITIES

PRESSURE SORES

TETHERED CORD SYNDROME

SPINA BIFIDA AND ORTHOPAEDICS

WHAT CAN GO “WRONG”?

LOW LUMBAR

SCOLIOSIS -TETHERED CORD SYNDROME

HIP FLEXION ADDUCTION CONTRACTURES

KNEE FLEXION DEFORMITIES

CALCANEOSUS DEFORMITIES

PRESSURE SORES

SPINA BIFIDA AND ORTHOPAEDICS

WHAT CAN GO “WRONG”?

SACRAL

SCOLIOSIS TETHERED CORD SYNDROME

HIP FLEXION ADDUCTION CONTRACTURES

KNEE FLEXION DEFORMITIES

CAVO VARUS DEFORMITIES

PRESSURE SORES

SPINA BIFIDA AND ORTHOPAEDICS

GAIT PATTERNS

LOW LUMBAR

CROUCH GIVEN THAT THERE IS NO

PLANTAR FLEXION POWER

SPINA BIFIDA AND ORTHOPAEDICS

GAIT PATTERNS

SACRAL

MILD CROUCH GIVEN THAT THERE IS
SOME PLANTAR FLEXION POWER

SPINA BIFIDA AND ORTHOPAEDICS

LUMBAR LEVELS

SOLID AFOs

SPINA BIFIDA AND ORTHOPAEDICS

SACRAL LEVELS

SOLID AFOs

SOMETIMES HINGED AFOs

SPINA BIFIDA AND ORTHOPAEDICS

LONG TERM GAIT PROGNOSIS

LUMBAR LEVELS

PLANTIGRADE FLAIL BRACEABLE FEET

KNEE FLEXION DEFORMITIES

HIP FLEXION ABDUCTION/ADDUCTION

HIP INTERNAL ROTATION WITH TIBIAL EXTERNAL TORSION

BODY MASS

SPINA BIFIDA AND ORTHOPAEDICS

LONG TERM GAIT PROGNOSIS

SACRAL LEVELS

PLANTIGRADE FLAIL BRACEABLE FEET

KNEE FLEXION DEFORMITIES ?

EXTERNAL TIBIAL TORSION

HIP ENLOCATION STATUS?

SPINA BIFIDA AND ORTHOPAEDICS

HIPS IN SPINA BIFIDA

TRY AND LEAVE THEM ALONE

BUT KEEPING THEM MOBILE AND NOT STIFF SO
THAT SITTING IS POSSIBLE

SACRAL LEVEL

TRY AND KEEP THEM ENLOCATED PERHAPS

SPINA BIFIDA AND ORTHOPAEDICS

KNEES IN SPINA BIFIDA

LUMBAR AND SACRAL LEVELS

TRY AND KEEP FULL EXTENSION RANGE

SPINA BIFIDA AND ORTHOPAEDICS

FEET AND TIBIAE IN SPINA BIFIDA

LUMBAR AND SACRAL LEVELS

FEET IN FRONT OF KNEES

FLAIL/FLEXIBLE PLANTIGRADE

BRACEABLE

SPINA BIFIDA AND ORTHOPAEDICS

FEET

NO SKIN SENSATION

FIXED DEFORMITIES

EXCESSIVE LOADING

PRESSURE SORES

OSTEOMYELITIS

AMPUTATION

SPINA BIFIDA AND ORTHOPAEDICS

FEET

FLEXIBILITY IS CRUCIAL FOR BRACING
ABILITY

BONY FUSIONS DO NOT ADD ANY EXTRA
FLEXIBILITY RATHER STIFFNESS

SPINA BIFIDA AND ORTHOPAEDICS

GAIT ANALYSIS

CAN HELP WITH

LOW LUMBAR AND SACRAL

GAIT CORRECTION

SPINA BIFIDA AND ORTHOPAEDICS



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THANK YOU