C2 Pedicle Screw Surgical Technique

pedicle screw fixation in the techniques cervical spine, accuracy and complications of transpedicular c2 screw, c2 screw, cureus c2 pedicle screw placement a novel teaching aid, technique of c2 pedicle screw fixation mo journal, lateral mass fixation surgical technique, surgical neurology international, c1 c2 fusion indication technique and complications, pedicle reduction osteotomy in the upper cervical spine, posterior fusion of the occipital axis in children with, 13 cervical pedicle screw fixation clinical gate, surgical treatment of odontoid fractures with c1 hook and, c1 lateral mass screw fixation pulsus group, surgical anatomy of the c 2 pedicle researchgate net, lateral mass screw fixation of the atlas surgical, p72 posterior clc2 pedicle screw rod fixation surgical, c2 pars pedicle screws in management of craniocevelical and, safety issues and neurological improvement following c1 c2, c1 c2 posterior cervical fixation by a harms technique, reduction amp fixation ao surgery reference, radiologic analysis of c2 to predict safe placement of, posterior clc2 screw and rod instrument springerlink, two step technique with osirix to evaluate feasibility, posterior atlantoaxial fixation a cadaveric and, thoraco lumbar pedicle screw fixation slideserve, anatomic consideration of c2 pedicle screw placement spine, pedicle screws for spine fusion spine health, atlantoaxial fixation overview of all techniques, oct spinal system synthes vo llnw net, c1 c2 posterior fixation indications technique and, c2 pedicle screw placement a novel cureus, c2 pars screw insertion ao surgery reference, indications and techniques of cervical pedicle screws c3 7, cervicalscrew2011 slideshare, 10 c2 translaminar screw fixation clinical gate, bilateral c1 laminar hooks combined with c2 pedicle screw, a new entrance technique for c2 pedicle screw placement, odontoid fractures surgical management by fusion, axis screw fixation a step by step review of the surgical, c1 c2 posterior fixation indications technique and, posterior atlantoaxial fusion using c1 lateral mass and c2, c1 c2 fusion indication techniques to fix it and general, a new technique for the surgical treatment of atlantoaxial, lateral mass screw fixation of the atlas surgical, targeting a safe entry point for c2 pedicle screw fixation, posterior atlantoaxial fusion surgical technique hd, surgical technique guide zimmerbiomet com, a new entrance technique for c2 pedicle screw placementthoracolumbar spine though data are limited pedicle screw fixation in the cervical spine may be an alter native technique for patients who have osteoporotic bones and require multilevel fixation techniques pedicle screw placement of the c2 pedicle after subperiosteal exposure of the posterior aspect of, the objective of the study was to describe the technique accuracy of placement and complications of transpedicular c2 screw fixation without spinal navigation patients treated by c2 pedicle screw fixations were identified from the surgical log book of the department clinical data were extracted retrospectively from the patients charts, mix c2 screw youtube plasterboard fixings the good the bad and the useless duration 10 27 vti interlink pedicle screw surgical technique duration 2 35, the c2 pedicle screw is more biomechanically stable and provides patients with increased postoperative range of motion in comparison to other methods of c2 fixation however as a result of the proximity of the c2 pedicle to the transverse
foramen there is a considerable risk of intraoperative morbidity due to vertebral artery injury laterally or vertebral canal breach medially, next the upper surface of c2 is exposed exposure of the upper surface of the pedicle of c2 will show the orientation to be given to the pedicle screw with sufficiently posterior fractures it may also be possible to see the actual fracture site, the following occipito cervico thoracic surgical technique guide describes the recommended these are typically the c1 and c2 fixation points it is recommended to insert the bone anchors with and pedicle screw fixation in the thoracic spine using either 4 75mm 5 5mm or 6 35mm from any, smooth shaft of the screw abuts the c2 nerve root typical screw length for the c1 lateral mass is 2632 the mm proximal 10 mm of which is typically nonthreaded step 5 identifying the c2 pedicle or pars entry point figure 5 exposing the pertinent c2 bony anatomy landmarks is critical for safe placement of c2 pars or pedicle screws, lateral mass screw fixation lateral mass screw fixation juju g s c qu o c c orgen harms technique of c1 c2 fixation c1 lateral mass screw and c2 pedicle screw with rod reconstruction reduction of c1 c2 can be achieved using rod as a lever arm can be used in patients with compromised posterior element, surgical technique introduction correction of a fixed cervical kyphosis is a surgical challenge that is frequently managed with a combination of anterior and posterior surgical procedures using anatomic landmarks the c2 pedicle screws are placed and the holes for the lateral mass screws at c3 c5 and c6 are made and tapped but the, great stress on the c2 screws we report a technique that uses both c2 pedicle and bilateral lateral mass screws c2 hybrid screws in children with an upper cervical disorder to preserve motion segment and secure strength in those who require occipital cervical fusion, in the late 1980s goel and laheri started to use c2 pedicle screws for atlantoaxial plate fixation in combination with c1 lateral mass screws however there had been no reports of pedicle screw fixation from c3 to c6 until the 1994 report by abumi and colleagues of pedicle screw fixation for traumatic lesions of the lower cervical spine, c2 posterior transarticular screws c1 lateral mass and c2 pedicle screws posterior clamping techniques and anterior screw fixation have achieved higher fusion rates than conservative treatment 6 12 the current report describes a new surgical technique for the stabilisation of odontoid fractures in which the stabilisation is provided by, c1 lateral mass screw placement is a powerful technique for segmental control of the c1 vertebra in this report we describe surgical technique for placement of c1 lateral mass screws on our c1 specimen c1 lateral mass is anatomically ideally suited for screw fixation to achieve c1 c2 arthrodesis c1 lateral mass screw fixation is a, surgical anatomy of the c 2 pedicle 26 28 xu et al 71 originally reported on their technique for c2 pedicle screw insertion and based upon their estimated angles of insertion of 30, the use of lateral mass screws in c1 first described by goel and laheri is one of the best techniques to achieve immobilization and posterior fusion of this segment and can be associated with any other technique for adjacent fusion pars pedicle laminar screws c2 laminar hooks or other occipitocervical systems in this paper we describe, posterior clc2 pedicle screw rod fixation surgical outcome side effects of this agent particularly bleeding within the surgical wound of 24 patients and biomechanical in vitro study purpose we studied the effective pain control and post operative bleed jon park1 harsimran brara2 michael
multiple techniques of posterior surgical fixation at c2 primarily for c1 c2 fusion have been described including sublaminar wiring transarticular screw fixation and more recently the combination of c1 lateral mass and c2 pedicle screws connected by rods. this latter technique is particularly advantageous because it creates a more rigid c1 c2 construct compared with the harms technique.

surgical technique

this series demonstrates that c2 pedicle screws can be put with precision under o arm guided. ao surgery reference quick online reference in clinical life the posterior c1 c2 stabilization techniques are generally the biomechanically more stable ones the two main techniques are c1 c2 stabilization according to goel harms c2 pedicle screw insertion. introduction multiple techniques of posterior surgical fixation at c2 primarily for c1 c2 fusion have been described including sublaminar wiring transarticular screw fixation and more recently the combination of c1 lateral mass and c2 pedicle screws connected by rods. this latter technique is particularly advantageous because it creates a more rigid c1 c2 construct compared with the harms technique.

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Intra articularis favored angle screw delineate the medial border of the c2 pedicle and mark the entry point for placement of the c2 pedicle screw with a high speed burr. The pilot hole is prepared with the 2.4 mm drill bit and just perforating the opposing cortex, the atlantoaxial motion segment which is responsible for half of the rotational motion in the cervical spine is a complex junction of the first c1 and second c2 cervical vertebrae. Destabilization of this joint is multifactorial and can lead to pathologic motion with neurologic sequelae. Posterior spinal fixation of the c1-c2 articulation in the presence of instability has been well-lehman et al. C2 pedicle screws generated a greater insertional torque and pull out strength in comparison to lateral mass pars and laminar screws. 10. C2 pedicle screw placement is technically demanding and the precise and exact three-dimensional understanding of the anatomy of the region and vertebral artery is mandatory. 3, when only a c1-c2 arthrodesis is done we prefer to use a c2 pedicle screw over a c2 pars screw this is because the pars screw starting hole is more distal and therefore requires more muscle dissection but if a c2 pedicle screw is not possible then we place a c2 pars screw. 3, indications and techniques of cervical pedicle screws c3 7 for degenerative conditions, kuniyoshi abumi and manabu ito introduction despite the increasing acceptance among spine surgeons of the use of pedicle screws in the lumbar and thoracic spine screw insertion into the cervical pedicle has been considered too risky for the surrounding neurovascular structures except at c2 and c7. London buckingham palace surgical technique of c2 pedicle screw 13 c2 pedicle screw judet 1962 entry point mid point of upper lower axial 40 o medial sagittal 30 o cephalad 1 24 28mm 14 c3 6 pedicle screw abumi 1997 entry point slightly lateral to the center of the articular mass close to the inferior margin of the inferior articular, procedure 10 c2 translaminar screw fixation c1 lateral mass to c2 pedicle screw fixation harms technique if vertebral artery anatomy favorable although it is tempting to place the neck in a flexed position to facilitate surgical exposure this should be avoided. Bilateral c1 laminar hooks combined with c2 pedicle screw fixation in the treatment of atlantoaxial subluxation after grisel syndrome various surgical techniques and instrumentation systems have been used to treat atlantoaxial subluxation although there is no consensus regarding the best treatment method for the pediatric population, then 31 patients underwent bilateral c2 pedicle screw fixation without screw violation into the spinal canal or vertebral artery injury by the new entrance technique the overall mean angles and and the length of the pedicle screw were 17 523 81 and 34 294 18 degrees and 25 852 06 mm respectively, odontoid fractures surgical management by fusion approximately 50 of axial rotation of the cervical spine occurs at the c1-c2 articulation instability at this level occurs most commonly as a result of fractures of the odontoid or bursting injuries of the atlas with disruption of the transverse ligament, axis screw fixation a step by step review of the surgical techniques surgical technique the patient is positioned prone with the head xed in a head performed with another isolated c2 screw xation tech nique pedicle pars or lamina screws one can also, this technique allows safer rigid fixation of c2 as the screws are not inserted near the vertebral artery the caveat however is that unlike the transarticular or c1-c2 lateral mass pedicles screw techniques of atlantoaxial fixation this technique requires intact posterior elements of c2, may be used to achieve fixation in 2001.
harms and melcher further popularized the technique of posterior c1 c2 fusion with c1 lateral mass screw and c2 pedicle screw 10 11 the advantages of this new technique are more rigid fixation at c1 than those of most other options favorable for inclusion into current instrumented, the c1 lateral mass screw technique on the other hand is very close to achieving the rigid fixation of the transarticular screw technique the c1 lateral mass screw with c2 pars pedicle screw technique is advantageous because it is not constrained by vertebral artery anomaly or by lack of alignment of c1 on c2, a new technique for the surgical treatment of atlantoaxial instability c1 lateral mass and c2 3 transfacet screwing safe implantations of c2 pedicle screws should be 3 5 mm moreover meng and xus radiographic study of c2 anatomy in patients with odontodeum recommended at least 5 5, c2 exits extradurally at the atlanto bleeding which can be troublesome at times to axial interspace and then passes medial and surgical technique hemostatic agents can also be useful for con inferior to the joint of the c1 lateral mass and the patient is positioned prone using a head trolling bleeding, methods fifteen patients underwent bilateral c1 lateral mass c2 pedicle screw fixation combined with posterior wiring the c2 pedicle screw was inserted at the entry point determined using the following method 4 mm lateral to and 4 mm inferior to the transitional point from the superior end line of the lamina to the isthmus of the pars interarticularis, this is a surgical technique video demonstrating posterior atlantoaxial fusion c1 lateral mass c2 pedicle screw fixation technique as described by dr goel and dr laheri which was, note the following surgical technique guide describes the recommended placement and use of all virage cervico thoracic spinal system components note when placed in the posterior cervical spine the screws may be implanted in the following locations c1 lateral mass c2 pedicle and pars interarticularis c2 translaminar, study design a prospective study and a technique note objectives to introduce a new entrance technique for c2 pedicle screw placement and to measure the related linear and angular parameters about the entrance point on computed tomography ct images the safety of this technique for patients

Pedicle Screw Fixation in the techniques Cervical Spine
April 15th, 2019 - thoracolumbar spine though data are limited Pedicle screw fixation in the cervical spine may be an alter native technique for patients who have osteoporotic bones and require multilevel fixation techniqueS Pedicle Screw Placement of the C2 Pedicle After subperiosteal exposure of the posterior aspect of

Accuracy and complications of transpedicular C2 screw
April 10th, 2019 - The objective of the study was to describe the technique accuracy of placement and complications of transpedicular C2 screw fixation without spinal navigation Patients treated by C2 pedicle screw fixations were identified from the surgical log book of the department Clinical data were extracted retrospectively from the patients’ charts

C2 screw
March 17th, 2019 - Mix C2 screw YouTube Plasterboard fixings The good the bad and the useless Duration 10 27 VTI InterLink™ Pedicle Screw Surgical Technique Duration 2 35
Cureus C2 Pedicle Screw Placement A Novel Teaching Aid
April 17th, 2019 - The C2 pedicle screw is more biomechanically stable and provides patients with increased postoperative range of motion in comparison to other methods of C2 fixation. However, as a result of the proximity of the C2 pedicle to the transverse foramen, there is a considerable risk of intraoperative morbidity due to vertebral artery injury laterally or vertebral canal breach medially.

Technique of C2 Pedicle Screw Fixation MO Journal
April 15th, 2019 - Next, the upper surface of C2 is exposed. Exposure of the upper surface of the pedicle of C2 will show the orientation to be given to the pedicle screw. With sufficiently posterior fractures, it may also be possible to see the actual fracture site.

Lateral Mass Fixation Surgical Technique
April 18th, 2019 - The following Occipito Cervico Thoracic Surgical Technique Guide describes the recommended techniques. These are typically the C1 and C2 fixation points. It is recommended to insert the bone anchors with pedicle screw fixation in the thoracic spine using either 4.75mm 5.5mm or 6.35mm from any surgical entry point.

Surgical Neurology International
April 8th, 2019 - Smooth shaft of the screw abuts the C2 nerve root. Typical screw length for the C1 lateral mass is 26–32mm, the proximal 10mm of which is typically nonthreaded. Step 5 - Identifying the C2 pedicle or pars entry point. Figure 5 - Exposing the pertinent C2 bony anatomy landmarks is critical for safe placement of C2 pars or pedicle screws.

C1 C2 Fusion indication technique and complications
April 12th, 2019 - Lateral mass screw fixation or C1 lateral mass screw fixation • Juju g s c qu o c c orgen harms technique of C1 C2 fixation • C1 lateral mass screw and C2 pedicle screw with rod reconstruction • Reduction of C1 C2 can be achieved using rod as a lever arm • Can be used in patients with compromised posterior element.

Pedicle Reduction Osteotomy in the Upper Cervical Spine
April 17th, 2019 - Surgical technique. Introduction. Correction of a fixed cervical kyphosis is a surgical challenge that is frequently managed with a combination of anterior and posterior surgical procedures. Using anatomic landmarks, the C2 pedicle screws are placed and the holes for the lateral mass screws at C3 C5 and C6 are made and tapped but the

Posterior fusion of the occipital axis in children with
April 9th, 2019 - Great stress on the C2 screws. We report a technique that uses both C2 pedicle and bilateral lateral mass screws. C2 hybrid screws in children with an upper cervical disorder to preserve motion segment and secure strength in those who require occipital cervical fusion.

13 Cervical Pedicle Screw Fixation Clinical Gate
April 17th, 2019 - In the late 1980s, Goel and Laheri started to use C2 pedicle screws for atlantoaxial plate fixation in combination with C1 lateral
mass screws However there had been no reports of pedicle screw fixation from C3 to C6 until the 1994 report by Abumi and colleagues of pedicle screw fixation for traumatic lesions of the lower cervical spine

**Surgical treatment of odontoid fractures with C1 hook and**

April 10th, 2019 - C2 posterior transarticular screws C1 lateral mass and C2 pedicle screws posterior clamping tech niques and anterior screw fixation have achieved higher fusion rates than conservative treat ment 6 12 The current report describes a new surgical tech nique for the stabilisation of odontoid fractures in which the stabilisation is provided by

**C1 lateral mass screw fixation Pulsus Group**

April 15th, 2019 - C1 lateral mass screw placement is a powerful technique for segmental control of the C1 vertebra In this report we describe surgical technique for placement of C1 lateral mass screws on our C1 specimen C1 lateral mass is anatomically ideally suited for screw fixation to achieve C1 C2 arthrodesis C1 lateral mass screw fixation is a

**Surgical anatomy of the C 2 pedicle researchgate net**

April 14th, 2019 - Surgical anatomy of the C 2 pedicle 26 28 Xu et al 71 originally reported on their technique for C 2 pedicle screw insertion and based upon their estimated angles of insertion of 30

**Lateral Mass Screw Fixation of the Atlas Surgical**

January 31st, 2019 - The use of lateral mass screws in C1 first described by Goel and Laheri is one of the best techniques to achieve immobilization and posterior fusion of this segment and can be associated with any other technique for adjacent fusion pars pedicle laminar screws C2 laminar hooks or other occipitocervical systems In this paper we describe

**P72 Posterior C1–C2 pedicle screw rod fixation surgical**

April 5th, 2019 - Posterior C1-C2 pedicle screw rod fixation surgical outcome side effects of this agent particularly bleeding within the surgical wound of 24 patients and biomechanical in vitro study PURPOSE We studied the effective pain control and post operative bleed Jon Park1 Harsimran Brara2 Michael Wang2 Sungmin Kim1 Daniel ing risk of single

**C2 Pars Pedicle Screws in Management of Cranio cervical and**

August 1st, 2014 - Introduction C2 pars pedicle screws have been a good and sound way of fixation during posterior upper cervical spine surgery 1 2 The use of the pedicle and pars of C2 as a part of complex upper cervical spine has allowed spine surgeons to use these structures for fixation of the anterior and posterior segments of the C2 vertebra as in cases of Hangman s fractures 3 4 5

**Safety Issues and Neurological Improvement following C1 C2**

April 12th, 2019 - Surgical technique The patient was intubated using fibre optic technique and positioned prone onto a radiolucent Jackson table with the Safety Issues and Neurological Improvement following C1 C2 Fusion using C1 Lateral Mass and C2 Pedicle Screw in Atlantoaxial Instability MK Kwan MS
Ortho CYW Chan MS Ortho TCC Kwan YN Gashi MD LB Saw

**C1 C2 Posterior Cervical Fixation by a Harms Technique**
April 8th, 2019 - C1 C2 Posterior Cervical Fixation by a Harms Technique
Modification SURGICAL TECHNIQUE This series demonstrates that C2 pedicle screws can be put with precision under O Arm guided

**Reduction amp Fixation AO Surgery Reference**
April 8th, 2019 - AO Surgery Reference quick online reference in clinical life The posterior C1 C2 stabilization techniques are generally the biomechanically more stable ones The two main techniques are C1 C2 stabilization according to Goel Harms C2 pedicle screw insertion

**Radiologic Analysis of C2 to Predict Safe Placement of**
April 14th, 2019 - INTRODUCTION Multiple techniques of posterior surgical fixation at C2 primarily for C1 C2 fusion have been described including sublaminar wiring transarticular screw fixation and more recently the combination of C1 lateral mass and C2 pedicle screws connected by rods 2-5 This latter technique is particularly advantageous because it creates a more rigid C1 C2 construct compared with

**Posterior C1-C2 screw and rod instrument SpringerLink**
April 18th, 2019 - Purpose To report the surgical technique and preliminary clinical results for the treatment of basilar invagination BI with atlantoaxial dislocation AAD by posterior C1-C2 pedicle screw and rod instrument

**“Two step” technique with OsiriX™ to evaluate feasibility**
January 28th, 2019 - The preoperative detailed study with OsiriX™ is in our experience crucial to study the vascular and osseous variations of CVJ and especially to study the feasibility to screw the true anatomical pedicle of C2 and therefore can change the approach or surgical technique

**Posterior atlantoaxial fixation A cadaveric and**
April 12th, 2019 - Background Atlantoaxial surgical fixation is widely employed treatment strategy for a myriad of pathologies affecting the stability of the atlantoaxial joint The most common technique used in adults and in certain cases in children involves a posterior construct with C1 lateral mass screws and C2 pars or pedicle screws

**THORACO LUMBAR PEDICLE SCREW FIXATION SlideServe**
April 10th, 2019 - THORACO LUMBAR PEDICLE SCREW FIXATION Contents Introduction History Surgical anatomy Indications and contraindications of fusion Fixation techniques Pedicle screw fixation Conclusions Introduction TL spine longest segment of spine Total 17 vertebrae Main weight bearing area

**Anatomic Consideration of C2 Pedicle Screw Placement Spine**
May 2nd, 2018 - Study Design This anatomic study tested placement of C2 pedicle screws using cadaver specimens Objectives To further assess the safety of transpedicular screw placement in the axis by comparing two
Pedicle Screws for Spine Fusion Spine Health

April 5th, 2019 - After the bone graft grows the screws and rods are no longer needed for stability and may be safely removed with a subsequent back surgery. However, most surgeons do not recommend removal unless the pedicle screws cause discomfort for the patient. In 5 to 10% of cases, the posterolateral gutter fusion use of pedicle screws has improved spinal fusion rates from approximately 60 to 90.

Atlantoaxial fixation Overview of all techniques

April 18th, 2019 - Clamps posterior wiring techniques C1-C2 transarticular screw fixation posterior C1 lateral mass screw with C2 pars or pedicle screw fixation and anterior transoral C1 lateral mass to C2 vertebral body fixation. Key words: Cervical fusion C1 screws transarticular Introduction Attempts at surgical stabilization of C1 and C2 from a posterior approach.

OCT Spinal System synthes vo llnwd net

April 10th, 2019 - Placement of C2 pedicle or pars intrarticular favored. Angle screw - Delineate the medial border of the C2 pedicle and mark the entry point for placement of the C2 pedicle screw with a high speed burr. The pilot hole is prepared with the 2.4 mm drill bit and just perforating the opposing cortex.

C1-C2 Posterior Fixation Indications Technique and

April 8th, 2019 - The atlantoaxial motion segment which is responsible for half of the rotational motion in the cervical spine is a complex junction of the first C1 and second C2 cervical vertebrae. Destabilization of this joint is multifactorial and can lead to pathologic motion with neurologic sequelae. Posterior spinal fixation of the C1-C2 articulation in the presence of instability has been well documented.

C2 Pedicle Screw Placement A Novel Cureus

April 6th, 2019 - Lehman et al. C2 pedicle screws generated a greater insertional torque and pull out strength in comparison to lateral mass pars and laminar screws. 10 C2 pedicle screw placement is technically demanding and the precise and exact three-dimensional understanding of the anatomy of the region and vertebral artery is mandatory.

C2 pars screw insertion AO Surgery Reference

April 4th, 2019 - When only a C1-C2 arthrodesis is done, we prefer to use a C2 pedicle screw over a C2 pars screw. This is because the pars screw starting hole is more distal and therefore requires more muscle dissection. But if a C2 pedicle screw is not possible, then we place a C2 pars screw.

Indications and Techniques of Cervical Pedicle Screws C3-7

April 14th, 2019 - 3 Indications and Techniques of Cervical Pedicle Screws C3-7 for Degenerative Conditions Kuniyoshi Abumi and Manabu Ito. Introduction Despite the increasing acceptance among spine surgeons of the use of pedicle...
screws in the lumbar and thoracic spine screw insertion into the cervical pedicle has been considered too risky for the surrounding neurovascular structures except at C2 and C7

**CervicalScrew2011 SlideShare**
April 14th, 2019 – London Buckingham palace Surgical technique of C2 pedicle screw 13 C2 pedicle screw Judet 1962 Entry point Mid point of Upper Lower Axial 40 o Medial Sagittal 30 o cephalad L 24 28mm 14 C3 6 pedicle screw Abumi 1997 Entry point slightly lateral to the center of the articular mass close to the inferior margin of the inferior articular

**10 C2 Translaminar Screw Fixation Clinical Gate**
April 18th, 2019 – Procedure 10 C2 Translaminar Screw Fixation • C1 lateral mass to C2 pedicle screw fixation Harms technique if vertebral artery anatomy favorable • Although it is tempting to place the neck in a flexed position to facilitate surgical exposure this should be avoided

**Bilateral C1 laminar hooks combined with C2 pedicle screw**
April 17th, 2019 – Bilateral C1 laminar hooks combined with C2 pedicle screw fixation in the treatment of atlantoaxial subluxation after Grisel syndrome Various surgical techniques and instrumentation systems have been used to treat atlantoaxial subluxation although there is no consensus regarding the best treatment method for the pediatric population

**A New Entrance Technique for C2 Pedicle Screw Placement**
April 5th, 2019 – Then 31 patients underwent bilateral C2 pedicle screw fixation without screw violation into the spinal canal or vertebral artery injury by the new entrance technique The overall mean angles ? and ? and the length of the pedicle screw were 17 52±3 81 and 34 29±4 18 degrees and 25 85±2 06 mm respectively

**Odontoid Fractures Surgical Management by Fusion**
April 14th, 2019 – Odontoid Fractures Surgical Management by Fusion Approximately 50 of axial rotation of the cervical spine occurs at the C1 C2 articulation Instability at this level occurs most commonly as a result of fractures of the odontoid or bursting injuries of the atlas with disruption of the transverse ligament

**Axis Screw Fixation A Step by Step Review of the Surgical**
March 8th, 2019 – Axis Screw Fixation – A Step by Step Review of the Surgical Techniques Surgical Technique The patient is positioned prone with the head fixed in a head performed with another isolated C2 screw ?xation tech nique pedicle pars or lamina screws One can also

**C1 C2 Posterior Fixation Indications Technique and**
March 27th, 2019 – This technique allows safer rigid fixation of C2 as the screws are not inserted near the vertebral artery The caveat however is that unlike the transarticular or C1 C2 lateral mass pedicles screw techniques of atlantoaxial fixation this technique requires intact posterior elements of C2
Posterior Atlantoaxial Fusion using C1 Lateral Mass and C2
April 9th, 2019 - may be used to achieve fixation. In 2001 Harms and Melcher further popularized the technique of posterior C1 C2 fusion with C1 lateral mass screw and C2 pedicle screw 10 11. The advantages of this new technique are more rigid fixation at C1 than those of most other options favorable for inclusion into current instrumented

C1 C2 Fusion Indication Techniques to Fix it and general
April 18th, 2019 - The C1 lateral mass screw technique on the other hand is very close to achieving the rigid fixation of the transarticular screw technique. The C1 lateral mass screw with C2 pars pedicle screw technique is advantageous because it is not constrained by vertebral artery anomaly or by lack of alignment of C1 on C2.

A New Technique for the Surgical Treatment of Atlantoaxial
April 3rd, 2019 - A New Technique for the Surgical Treatment of Atlantoaxial Instability. C1 Lateral Mass and C2 3 Transfacet Screwing. Safe implantations of C2 pedicle screws should be 3 5 mm. Moreover, Meng and Xu’s radiographic study of C2 anatomy in patients with os odontoideum recommended at least 5 5

Lateral mass screw fixation of the atlas surgical
April 13th, 2019 - C2 exits extradurally at the atlantoaxial interspace and then passes medial and Surgical Technique. Hemostatic agents can also be useful for con inferior to the joint of the C1 lateral mass and The patient is positioned prone using a head trolling bleeding.

Targeting a Safe Entry Point for C2 Pedicle Screw Fixation
January 22nd, 2017 - Methods. Fifteen patients underwent bilateral C1 lateral mass C2 pedicle screw fixation combined with posterior wiring. The C2 pedicle screw was inserted at the entry point determined using the following method: 4 mm lateral to and 4 mm inferior to the transitional point from the superior end line of the lamina to the isthmus of the pars interarticularis.

Posterior atlantoaxial fusion Surgical technique HD
April 12th, 2019 - This is a surgical technique video demonstrating posterior atlantoaxial fusion C1 lateral mass C2 pedicle screw fixation technique as described by Dr. Goel and Dr. Laheri which was

Surgical Technique Guide zimmerbiomet.com
April 10th, 2019 - Note. The following Surgical Technique Guide describes the recommended placement and use of all Virage Cervico Thoracic Spinal System components. Note When placed in the posterior cervical spine the screws may be implanted in the following locations: C1 lateral mass, C2 Pedicle and Pars Interarticularis, C2 Translaminar.

A New Entrance Technique for C2 Pedicle Screw Placement
April 21st, 2014 - Study Design. A prospective study and a technique note. Objectives. To introduce a new entrance technique for C2 pedicle screw placement and to measure the related linear and angular parameters about the
entrance point on computed tomography CT images. The safety of this technique for patients.