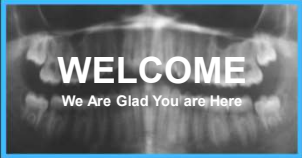


ACADEMY of GENERAL DENTISTRY AGD2021 THE PREMIER MEETING FOR GENERAL DENTISTRY AUSTIN, TEXAS JUNE 9 - 12 AGD2021.ORG

Principles of Third Molar Impactions
 Diagnosis ,Case Selection and Treatment Planning for Third Molars



WELCOME
 We Are Glad You are Here

David L. Roberts, DDS, PA
 June 6, 2021
dave@robertsdds.com

Principles of Third Molar Impactions
 Diagnosis ,Case Selection and Treatment Planning for Third Molars

The Course Outline

Etiology : What is causing the problem
 Pathology : What the problem is causing
 Pre-Surgical Evaluation
 Dx and Tx Planning 3rds
 Radiological Examination
 Coronectomy
 Classifications / ADA Codes

Disclaimer:
ADA CERP Standard IX

“Participants should be cautioned about the potential risks of using limited knowledge when integrating new techniques in their practice”

How I Got Here

UIC College Dentistry University of Illinois Dental School (1981-1985)

UTHSCSA 2 Year GPR (1985-1987)

Full-Time general dental associate (1987-1991)

Practice Transition Period (1991-1997)

Full-Time traveling extraction implant/anesthesia practice (1997-Present)

Traveling Surgery Practice

www.robertsdds.com

Clinical Experience By The Numbers

Procedures Performed

- 150,000 Extractions
- 5500 Dental Implants
- 28,000 IV Moderate Sedations
- 400 Dental Offices

Clinical Training & Experience

- 12 Advanced Cardiac Life Support Re-Certifications
- Parenteral Conscious Sedation and Advanced Emergency Procedures TDA / TSBDE
- Certificate in Conscious Sedation from the American Dental Society of Anesthesiology (ADSA)



Virtual Innovative Practice Systems



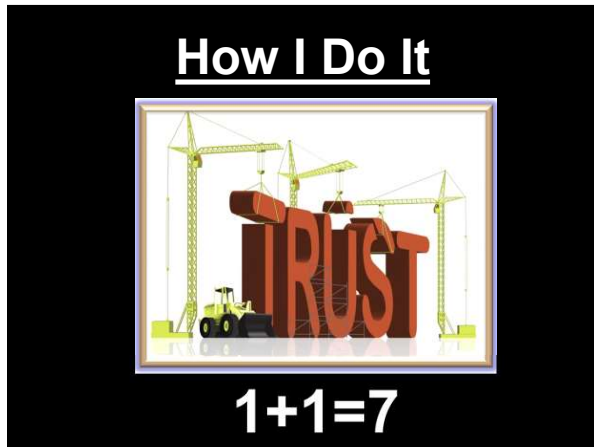
www.vipsdental.com

Virtual Innovative Practice Systems



www.vipsdental.com







Ask Questions



During or After ?

What Do You See ?



PARADIGM SHIFT

- Bigger Flaps
- Less Sutures
- Remove Bone (Strategically)
- Dry Sockets
- Post Op Instructions
- Suction / Handpiece
- The Key Is To Think 3D
- (O<H)+RI=S

The Learning Curve

EFFORT

TIME

Red Zone
Stress

Stretch Zone
More Learning

Comfort Zone
Less Learning

Stress

Surgical Extractions

ELEVATED

HIGH

GUARDED

SEVERE

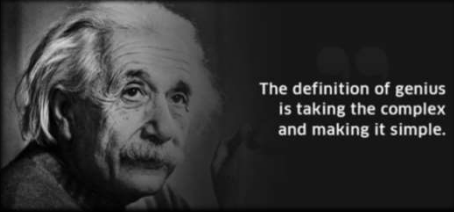
LOW

TERROR METER

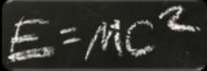
The Key Is To

think 3D

Principles of Surgical Extractions
Lets Make it Simple



The definition of genius is taking the complex and making it simple.



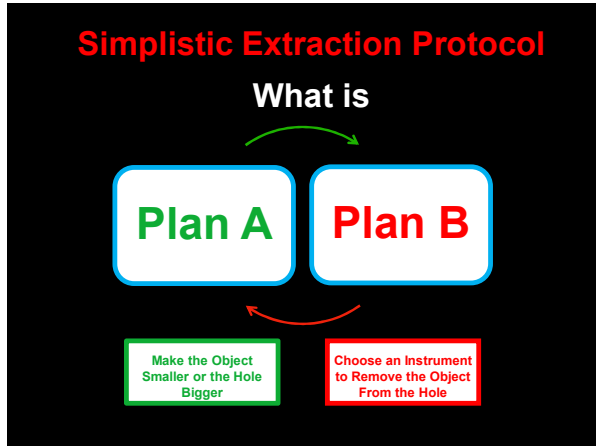
Simplistic Extraction Formula
Complex Problems



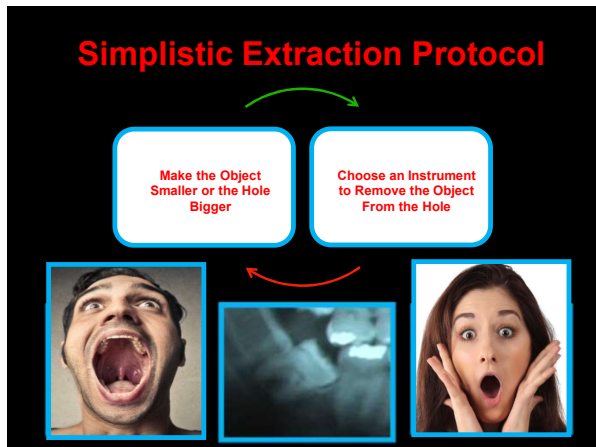
Simple Solution
(O<H)+RI=S

Simplistic Extraction Algorithm
(O<H)+RI=S









Simplistic Extraction Protocol

Make the Object Smaller or the Hole Bigger

Choose an Instrument to Remove the Object From the Hole

The diagram illustrates a two-step process for tooth extraction. The first step, 'Make the Object Smaller or the Hole Bigger', is shown with an image of a tooth being prepared with a bur. The second step, 'Choose an Instrument to Remove the Object From the Hole', is shown with an image of a tray of instruments. A final image shows the tooth being extracted.

Simplistic Extraction Protocol

Make the Object Smaller or the Hole Bigger

Choose an Instrument to Remove the Object From the Hole

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Simplistic Extraction Protocol

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Simplistic Extraction Protocol

Make the Object Smaller or the Hole Bigger

Choose an Instrument to Remove the Object From the Hole




The diagram shows a surgical site on the left and a tray of instruments on the right. A green arrow points from the instrument tray to the surgical site, and a red arrow points from the surgical site back to the instrument tray.

Simplistic Extraction Protocol

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Simplistic Extraction Protocol

Make the Object Smaller or the Hole Bigger

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Simplistic Extraction Protocol

Make the Object Smaller or the Hole Bigger

Choose an Instrument to Remove the Object From the Hole

Simplistic Extraction Protocol

Success

Principles of Third Molar Impactions

Diagnosis ,Case Selection and Treatment Planning for Third Molars

Course Outline

Etiology : What is causing the problem
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Dx and Tx Planning 3rds
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Classifications / ADA Codes

Diagnosis ,Case Selection and Treatment Planning for Third Molars

Etiology

Why do so many people need to have 3rd molars removed?

Most patients lack the anatomic space necessary for successful eruption of third molars



Diagnosis ,Case Selection and Treatment Planning for Third Molars

Etiology

Skull evidence from the last 400-500 years

Softer Diet / Refined



Improved Dental Care

Less Tooth Width Attrition

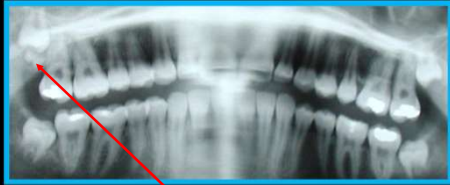
Shorter Mandibular Length

Less Tooth Loss
Less Arch Length Loss

Diagnosis ,Case Selection and Treatment Planning for Third Molars

Etiology

75% of patients have 4 wisdom teeth



25% of patients have 0, 1, 2, 3, 5, 6, 7, 8 etc.

Diagnosis ,Case Selection and Treatment Planning for Third Molars

Pathology

- Pericoronitis
- Crowding of the Anterior Teeth?
- Damage to Adjacent Structures
- Teeth (2nd Molars)
- Bone (Distal to 2nd Molars)
- Cysts & Tumors

Diagnosis ,Case Selection and Treatment Planning for Third Molars

Pericoronitis

Pericoronitis can vary from a mild annoyance to causing a life threatening situation.

Pericoronitis is the most common indication for the removal of third molars.



Diagnosis ,Case Selection and Treatment Planning for Third Molars

Fake News ?

“My Wisdom Teeth are Causing My Teeth to Shift”



Impacted wisdom teeth do not cause crowding of the mandibular anterior teeth

Diagnosis ,Case Selection and Treatment Planning for Third Molars

Fake News ?

“ Since my teeth are impacted that means the Surgery will be more painful ”

“ Since my teeth are erupted that means the surgery will be less painful ”



Diagnosis ,Case Selection and Treatment Planning for Third Molars

Pathology

Damage to Adjacent Normal Structures

2nd Molars
The damage can occur either from the follicular development of the third molar or from bacterial retention on the distal of the 2nd molar. Extensive damage can occur without symptoms.



Bone
The normal osseous periodontal architecture posterior to second molars can be asymptotically destroyed by the attempted eruption of the third molar



Diagnosis ,Case Selection and Treatment Planning for Third Molars

Pathology

Good News

Usually in patients 25 years and younger, the periodontium posterior to the 2nd molar will usually repair itself upon removal of the 3rd molar.



Diagnosis ,Case Selection and Treatment Planning for Third Molars

Pathology

Cysts & Tumors

These are rare occurrences. They can occur without causing pain or pressure. They can be the cause of a devastating loss of tissue due to unattended pathology.



Retained 3rd molars should be examined radiographically every 3 years.



Diagnosis ,Case Selection and Treatment Planning for Third Molars

Pre-Surgical Evaluation

The Treatment Planning BIG Question

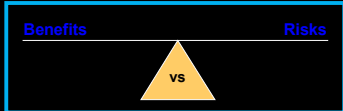
Will the presence of wisdom teeth allow for a long-term healthy and functional benefit to the patient ?



Diagnosis ,Case Selection and Treatment Planning for Third Molars

Pre-Surgical Evaluation

- Patient's Age
- Surgical Difficulty
- Patient Symptoms
- Oral Hygiene/Probing Depths
- Anxiety Level
- Dental Health
- Medical History



Diagnosis ,Case Selection and Treatment Planning for Third Molars

Radiographic Examination

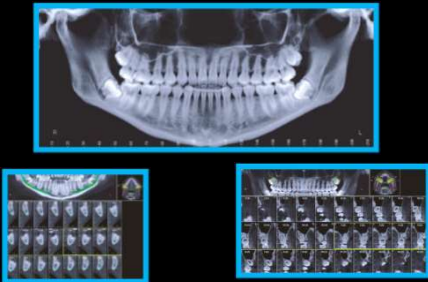


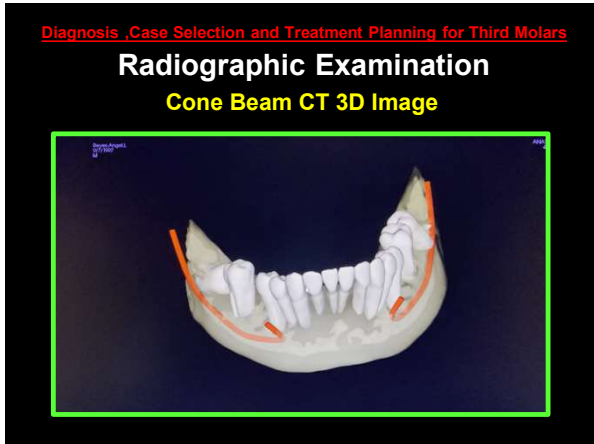
Panoramic Less Than a Year Old
Consider CBCT as Needed

Diagnosis ,Case Selection and Treatment Planning for Third Molars

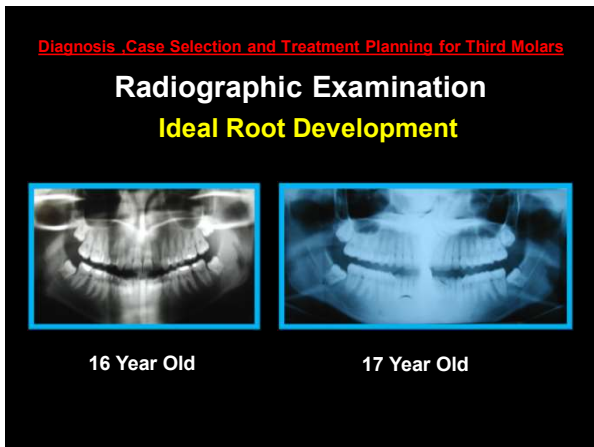
Radiographic Examination

Cone Beam CT 3D Image










Diagnosis ,Case Selection and Treatment Planning for Third Molars

Radiographic Examination
Fully Developed



23 Year Old 25 Year Old

Diagnosis ,Case Selection and Treatment Planning for Third Molars


Radiographic Examination
THINK Consult THINK



32 Year Old

Diagnosis ,Case Selection and Treatment Planning for Third Molars

Radiographic Examination
Consider Coronectomy
Expected or Unexpected Surgical Difficulty



Diagnosis ,Case Selection and Treatment Planning for Third Molars

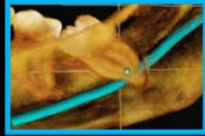
Radiographic Examination

Consider Coronectomy

Preventing Injury to the IAN

Damage to the inferior alveolar nerve while removing lower third molars is more likely when the roots are in close proximity to the IAN

Coronectomy, or intentional root retention, can minimize this problem.



Diagnosis ,Case Selection and Treatment Planning for Third Molars

Radiographic Examination

Consider Coronectomy

Injury to the Inferior Alveolar Nerve

The incidence of inferior alveolar nerve disturbance after third molar removal has been reported to vary widely

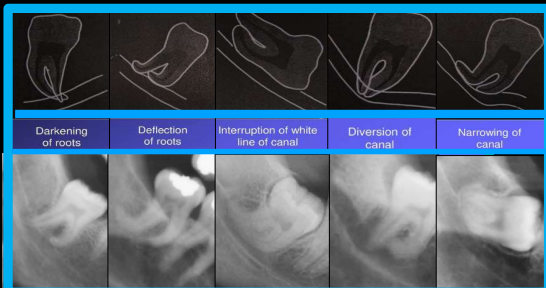
Temporary disturbances, are by far more common, however; permanent problems have been reported in a frequency of 0.6 to 2.2 percent of all disturbances⁽¹⁾

(1). Inferior Alveolar Nerve Damage During Removal of Mandibular Third Molars; May 1, 2004
By Howard Holmes, DDS, Dip OMS, FRCR; David Lam, BDS, Taylor MC Quire, DDS and Peter Giolfous DDS

Diagnosis ,Case Selection and Treatment Planning for Third Molars

Radiographic Examination

Consider Coronectomy



Diagnosis ,Case Selection and Treatment Planning for Third Molars

Radiographic Examination


Consider Coronectomy

Patient Understanding Is Key

Discuss possible risks and complications and make sure the patient understands completely

Utilize an informed consent which is customized for this procedure

Will require multiple follow-ups
 1 - month
 3 - month
 6 - month
 12 - month
 and every 12 months until stable

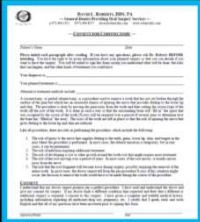


Diagnosis ,Case Selection and Treatment Planning for Third Molars

Radiographic Examination

Consider Coronectomy

Coronectomy Consent Form



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Diagnosis ,Case Selection and Treatment Planning for Third Molars

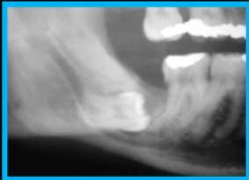
Radiographic Examination

Coronectomy Contraindications

Active infection

Mobility of tooth


Teeth that are horizontally impacted along the IAN



Diagnosis ,Case Selection and Treatment Planning for Third Molars


Radiographic Examination Coronectomy Procedure

1. Raise a conventional flap with releasing incision
2. Ensure the crown is completely transected, and doesn't need to be fractured from the root.
3. Avoid mobilizing the roots
4. The remaining roots should be at least 3mm below the crestal bone (no remaining enamel)
5. Irrigate well and visually inspect socket for debris
6. Close with 3-0 chromic sutures



Diagnosis ,Case Selection and Treatment Planning for Third Molars

Radiographic Examination Coronectomy Procedure Coronectomy Case Report 25 Year Old Female




Pre Operative

07/2

Diagnosis ,Case Selection and Treatment Planning for Third Molars

Radiographic Examination Coronectomy Procedure A Closer Look




07/2

Diagnosis ,Case Selection and Treatment Planning for Third Molars

Radiographic Examination Coronectomy Procedure

Visual Inspection of Root

Post-Operative

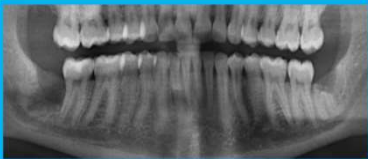


#32 #17

Diagnosis ,Case Selection and Treatment Planning for Third Molars

Radiographic Examination Coronectomy Procedure

Follow - Up



Immediate Post-Operative Panoramic Radiograph
1 month pano
3 month pano
6 month pano
Every 12 month until stable

Diagnosis ,Case Selection and Treatment Planning for Third Molars


Radiographic Examination Coronectomy Procedure

Follow -Up




Pre-Operative 4 years Post-Operative

Principles of Third Molar Impactions
Questions ?



David Roberts DDS




Diagnosis ,Case Selection and Treatment Planning for Third Molars

Classifications/Coding
ADA Codes CDT

7140 Extraction Erupted
 7210 Surgical Extraction Erupted
 7220 Soft Tissue Impaction
 7230 Partial Bony Impaction
 7240 Complete Bony Impaction
 7241 Complicated Bony Impaction
 7250 Removal of Residual Tooth Roots
 7251 Coronectomy/Intentional Partial Tooth Removal


Diagnosis ,Case Selection and Treatment Planning for Third Molars

Classifications/Coding
ADA Code
D7140 Simple Extraction




Extraction, Erupted Tooth
or Exposed Root
(elevation and/or forceps removal)

Possibly 7220 ?




Diagnosis ,Case Selection and Treatment Planning for Third Molars

Classifications/Coding
ADA Code
D7210 Surgical Extraction Erupted




Surgical removal of erupted tooth requiring elevation of mucoperiosteal flap and removal of bone and or section of tooth

Possibly 7220 ?




Diagnosis ,Case Selection and Treatment Planning for Third Molars

Classifications/Coding
ADA Code D7220 Soft Tissue Impaction




Removal of impacted tooth – soft tissue Occlusal surface of tooth covered by soft tissue; Requires mucoperiosteal flap elevation

Possibly 7230 ?




Diagnosis ,Case Selection and Treatment Planning for Third Molars

Classifications/Coding
ADA Code D7230 Partial Bony Impaction




Possibly 7220 ?



Possibly 7240 ?


Removal of impacted tooth – partially bony Part of crown covered by bone; Requires mucoperiosteal flap elevation and bone removal



Diagnosis ,Case Selection and Treatment Planning for Third Molars


Classifications/Coding

ADA Code D7240 Complete Bony Impaction



Possibly 7241 ?


Removal of impacted tooth – complete bony
Most or all of crown covered by bone;
Requires mucoperiosteal flap elevation and
bone removal



Diagnosis ,Case Selection and Treatment Planning for Third Molars


Classifications/Coding

ADA Code D7241 Complicated Bony Impaction



Possibly 7240 ?


Removal of impacted tooth – completely bony,
with unusual surgical complications
Most or all of crown covered by bone;
Unusually or complicated due to factors such
as nerve dissection required, separate closure
of maxillary sinus required or aberrant tooth
position



Diagnosis ,Case Selection and Treatment Planning for Third Molars


Classifications/Coding

ADA Code D7250 Removal of Residual Root



Possibly 7230 or 7241 ?

Removal of residual tooth roots
(cutting procedure)
Includes cutting of soft tissue and bone,
removal of tooth structure, and closure



Diagnosis ,Case Selection and Treatment Planning for Third Molars

Classifications/Coding

ADA Code D7251 Intentional Partial Tooth Removal



Coronectomy Intentional Partial Tooth Removal





Diagnosis ,Case Selection and Treatment Planning for Third Molars

Classifications/Coding


ADA Code Supernumerary Tooth Numbers

Supernumerary Teeth Chart															
R							L								
51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66
82	81	80	79	78	77	76	75	74	73	72	71	70	69	68	67


Add 50 to Closest Tooth #

Principles of Third Molar Impactions
Questions ?



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GENERAL DENTISTRY
