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### **PROBLEM** Crowding



# **BACTERIA & PLAQUE ISSUES**

#### Can create the following issues

• Difficulty in properly brushing and flossing all tooth surfaces

### Can lead to or show signs of

- Caries/tooth decay
- Plaque and calculus accumulation leading to o Periodontal disease
- o Poor root support, progression of bone loss
- Tooth mobility
- Abscesses

### Potential patient symptoms

- Sensitivity. Discolored teeth in crowded areas
- Inflamed and bleeding gums
- Receding gums
- Loose teeth

## MALOCCLUSION RELATED ISSUES

# Can create the following issues Improper occlusal function

- Improper occlusal function
- If teeth are not upright, vertical forces do not transfer down from crown to root to the bone during occlusion
   o Lateral stress on posterior teeth and surrounding periodontal structures

### Can lead to or show signs of

- Occlusal trauma abfractions
- Uneven wear, chipping
- Gum, periodontal problems o Gingival recession, bone loss
- Overlapping teeth that get worse over time if left untreated

### Potential patient symptoms

- Tooth sensitivity from wear
- Receding gums
- Loose teeth

# PROBLEM Spacing



# BACTERIA & PLAQUE ISSUES

## Can create the following issues

• Possible food impaction between posterior teeth

### Can lead to or show signs of

- Gum problems due to the lack of
- protection by the teeth
- Periodontal pockets
- Gum disease
- Sore, tender tissue

# Potential patient symptoms

- Sore, tender tissue
- Inflamed and bleeding gums

## MALOCCLUSION RELATED ISSUES

### Can create the following issues

- Insufficient anterior support from lack of canine guidance
- o Tongue thrust may flare anterior teeth, including canines

## Can lead to or show signs of

- Premature posterior wear
- Periodontal problems

# Potential patient symptoms

• Increasingly flared anterior teeth

### **PROBLEM** Deep Bite



# MALOCCLUSION RELATED ISSUES

## Can create the following issues

• Improper function of anterior teeth

## Can lead to or show signs of

- Occlusal trauma
- o Periodontal problems, including bone loss
- Abnormal wear, chipping of lower anterior teeth
- Lower front teeth can over-erupt and damage palate behind top front teeth

### Potential patient symptoms

- Receding gums
- Abnormal wear of teeth

## **TMJ ISSUES**

### Can create the following issues

• TMD

## Can lead to or show signs of

- Tension of the chewing muscles
- Creating abnormal forces on TMJ and may lead to TMD
- Retrognathic position of lower arch may exacerbate risk of TMD

## Potential patient symptoms

### • Jaw joint pain

- Clicking, popping noise in jaw joint when opening or closing mouth
- Headaches, neck pain

## **PROBLEM** Excessive Overjet



# MALOCCLUSION RELATED ISSUES

### Can create the following issues

• Upper anterior teeth are protruded o Little if any contact between the upper and lower front teeth, including canines

### Can lead to or show signs of

- Anterior tooth trauma or fracture
- Posterior tooth trauma or fracture from lack of canine guidance

#### Potential patient symptoms

- Chipped/fractured anterior teeth
- Patient complains of unattractive smile



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## **PROBLEM** Cross Bite



# MALOCCLUSION RELATED ISSUES

### Can create the following issues

- Abnormal centric relation/centric occlusion mandibular shift o Dysfunctional chewing patterns
- If teeth are not upright, vertical forces do not transfer down from crown to root to the bone during occlusion o Lateral stress on posterior teeth and surrounding periodontal structures

### Can lead to or show signs of

- Occlusal trauma abfractions
- Abnormal wear or chipping
- Periodontal problems, including tooth movement and bone loss
- Abnormal stress on buccal sides of teeth

### **Potential patient symptoms**

- Increased sensitivity
- Abfraction
- Loose back teeth
- Biting of own lips and cheek when eating or talking

## TMJ RELATED ISSUES

### Can create the following issues

• TMD

## Can lead to or show signs of

- Abnormal forces on TMJ and may lead to TMD
- Dysfunctional chewing patterns and possibly jaw joint problems

## **Potential patient symptoms**

- Jaw joint pain
- Limited movement, locking of jaw
- Clicking, popping noise in jaw joint when opening or closing mouth

# PROBLEM Edge to Edge Bite



# MALOCCLUSION RELATED ISSUES

# Can create the following issues

 Improper function of anterior teeth o Upper and lower anterior teeth are in edge to edge contact

### Can lead to or show signs of

 Premature wear, chipping on anterior teeth o Clinical crowns shortened as incisal edge wears down

### Potential patient symptoms

- Abnormal wear anterior teeth are short or worn down
- Tooth sensitivity

## TMJ RELATED ISSUES

# Can create the following issues

• TMD

# Can lead to or show signs of

- End to end anterior teeth relationship can result in TMD
- Limited range of motion, pain during chewing
- Jaw joint pain (TMD) that affects ability to chew food

## Potential patient symptoms

- Jaw joint pain
- Limited movement, locking of jaw
- Clicking, popping noise in jaw joint when opening or closing mouth
- Headaches, neck pain

### PROBLEM Anterior Open Bite



## MALOCCLUSION RELATED ISSUES

# Can create the following issues

- Improper function of anterior and posterior teeth
- o Lack of anterior contact, posterior contact overload

## Can lead to or show signs of

- Premature wear on posterior teeth
- Occlusal trauma abfractions
- Periodontal problems o Deep pocketing of posterior teeth
- o Gum recession, bone loss, poor root support

## Potential patient symptoms

- Abnormal wear on posterior teeth
- Small notch in teeth at gum line
- Gum recession
- Loose teeth

# TMJ RELATED ISSUES

### Can create the following issues

• TMD

## Can lead to or show signs of

• Wear on posterior teeth which may cause jaw joint pain (TMD)

# Potential patient symptoms

Jaw joint pain

