M5#1

A 58 year old patient complains about clicking in the temporomandibular joint during eating. Periodically as a result of wide mouth opening the mandible takes up such a position that makes mouth closing impossible. The mandible can be easily placed into its initial position by pressing with fingers upon its coronoid processes. What is your presumptive diagnosis?

- A. Habitual dislocation of mandible.
- **B.** Acute dislocation of mandible.
- C. Subluxation of mandible.
- D. Anterior dislocation.
- E. Posterior dislocation.

A. Habitual dislocation of mandible.

A 20-year-old patient complains about inability to move with his lower jaw, speech difficulty and problems during eating. He associates his condition with a trauma he got when biting on apple. Examination revealed half-open mouth, open bite due to the solitary contacts of distal tubercles of the last molars, salivation, indistinct speech. Articular heads of mandible can be felt anterior to both tragi. What is the most likely diagnosis?

- A. Acute anterior bilateral mandible luxation.
- B. Fibrous ankylosis of temporomandibular joint.
- C. Exacerbation of osteoarthritis of temporomandibular joint.
- D. Traumatic bilateral fracture of articular processes of mandible.
- E. Fracture of articular processes of mandible.

A. Acute anterior bilateral mandible luxation.

A patient applied to a dentist complaining about inability to close her mouth, laboured speech. Objectively: oral cavity is half-open with saliva outpouring from it, central line is deviated to the right. There is a cavity in front of antilobium; below the malar arch there is a protrusion of mandible head into the infratemporal fossa. What is the most probable diagnosis?

- A. Unilateral anterior dislocation of mandible on the left.
- B. Unilateral anterior dislocation of mandible on the right.
- C. Unilateral posterior dislocation of mandible on the left.
- D. Unilateral posterior dislocation of mandible on the right.
- E. Bilateral anterior dislocation

A. Unilateral anterior dislocation of mandible on the left.

A 20-year-old patient complains about inability to move with his lower jaw, speech difficulty and problems during eating. He associates his condition with a trauma he got when biting on apple. Examination revealed half-open mouth, open bite due to the solitary contacts of distal tubercles of the last molars, salivation, indistinct speech. Articular heads of mandible can be felt anterior to both tragi. What is the most likely diagnosis?

- A. Acute anterior bilateral mandible luxation.
- **B.** Fibrous ankylosis of temporomandibular joint.
- C. Exacerbation of osteoarthritis of temporomandibular joint.
- **D.** Traumatic bilateral fracture of articular processes of mandible.
- E. Fracture of articular processes of mandible.

A. Acute anterior bilateral mandible luxation.

A maxillofacial surgery department admitted a patient with a half-open mouth, his chin was put forward and deviated to the right. On palpation, the left mandibular fossa was found to be empty. Internal palpation failed to detect the left articular head. Mandibular movements were possible but restricted. What is the most likely diagnosis?

- A. Unilateral dislocation of the left TMJ.
- **B.** Unilateral dislocation of the right TMJ.
- C. Bilateral dislocation of the TMJ.
- D. Acute arthritis of the left TMJ.
- E. Acute arthritis of the right TMJ.

A. Unilateral dislocation of the left TMJ.

A patient with unilateral dislocation of mandibulotemporal joint was delivered to the maxillofacial department. What type of local anesthesia is indicated for relaxation of masticatory muscles?

- A. Subzygomatic Bersche-Dubov-Uvarov's anesthesia.
- **B.** Intraoral mandibular anesthesia.
- C. Extraoral mandibular anesthesia, submandibular way.
- **D.** Extraoral mandibular anesthesia, retromandibular way.
- E. Torus anesthesia.

A. Subzygomatic Bersche-Dubov-Uvarov's anesthesia.

On the second day after tooth extraction a 35-year-old woman applied to a facial surgeon and complained about pain in the parotid-masticatory region and sensation of lacking contact between the upper and lower jaw teeth on the right. Examination revealed chin deviation to the left, half-open mouth, closed lips, disturbed occlusion. There is also limitation of lateral mandible movements. In front of the right ear tragus soft tissues sink down. What examination is expected to be the most informative in this case?

- A. TMJ roentgenography.
- **B.** TMJ ultrasound.
- C. Mandible roentgenography.
- **D.** Bimanual TMJ investigation.
- *E*. -

A. TMJ roentgenography.

A female patient consulted a stomatologist about inability to close her mouth, speech difficulty. Objectively: the oral cavity is half-open, there is drooling, central line deviates to the right. There is a depression in front of the tragus, and above the malar arch the mandibular condyle bulges inward the infratemporal fossa. What is the most likely diagnosis?

- A. Unilateral anterior dislocation of mandible on the left.
- **B.** Unilateral anterior dislocation of mandible on the right.
- C. Unilateral posterior dislocation of mandible on the left.
- **D.** Unilateral posterior dislocation of mandible on the right.
- E. Bilateral anterior dislocation.

A. Unilateral anterior dislocation of mandible on the left.

A 58-year-old patient complains about clicking in the temporomandibular joint during eating. Periodically as a result of wide mouth opening the mandible takes up such a position that makes mouth closing impossible. The mandible can be easily placed into its initial position by pressing with fingers upon its coronoid processes. What is your presumptive diagnosis?

- A. Habitual dislocation of mandible.
- B. Acute dislocation of mandible.
- C. Subluxation of mandible.
- D. Anterior dislocation.
- E. Posterior dislocation.

A. Habitual dislocation of mandible.

A female patient consulted a stomatologist about inability to close her mouth, speech difficulty. Objectively: the oral cavity is half-open, there is drooling, central line deviates to the right. There is a depression in front of the tragus, and above the malar arch the mandibular condyle bulges inward the infratemporal fossa. What is the most likely diagnosis?

- A. Unilateral anterior dislocation of mandible on the left.
- B. Unilateral anterior dislocation of mandible on the right.
- C. Unilateral posterior dislocation of mandible on the left.
- D. Unilateral posterior dislocation of mandible on the right.
- E. Bilateral anterior dislocation

A. Unilateral anterior dislocation of mandible on the left.

A 40-year-old female patient complains about crepitation and pain in the region of TMJ projection on the right, that arise in the final stage of mouth opening. Articular sounds turned up after dental prosthetics. Mouth opening is unlimited, mouth is opened in a straight path, amplitude of mouth opening is 5 cm. What is the most likely diagnosis?

- A. Lower jaw subluxation.
- B. Lower jaw dislocation.
- C. Anterior dislocation of articular disk.
- D. Posterior dislocation of articular disk.
- E. Meniscus tresis.

A. Lower jaw subluxation

A 45-year-old man complains of pain and crepitation in the temporomandibular joint during the movements of the lower jaw. Objectively, the face is symmetrical, the mouth opens with slight displacement to the left. The dentition is intact. To clarify the diagnosis, X-ray of the temporomandibular joint was performed. Where should the heads of the mandible be located normally during the maximum mouth opening?

A. In front of the articular tubercle

B. In the center of the anterior slope of the articular tubercle

C. At the apex of the articular tubercle

D. In the center of the glenoid fossa

E. Closer to the distal part of the glenoid fossa

C. At the apex of the articular tubercle

M5#2

A 42-year-old patient complains about acute pain in the region of the left temporomandibular joint (TMJ) that irradiates to the ear; headache, general indisposition, impossible mastication and limited mouth opening. Objectively: the patient's face is asymmetric due to the edema in the region of the left temporomandibular joint. The skin in this region is hyperemic. The pain is made worse by the smallest movements of mandible. Palpation of the joint causes acute pain. Mouth opening is limited down to 15-20 mm. What is the most likely diagnosis?

- A. Acute arthritis of the left TMJ.
- **B.** Acute purulent parotitis.
- C. Mandible subluxation.
- **D.** Deforming arthrosis of the left TMJ.
- E. Myogenous osteoarthrosis.

A. Acute arthritis of the left TMJ.

A 66-year-old patient complains about pain in the left parotidmasticatory region, disorder of mandible movements. Objectively: skin over the left temporomandibular joint (TMJ) is reddened, the surrounding tissues are edematic. Disfunction of the left temporomandibular joint is present. What is the most likely diagnosis?

- A. Acute purulent left-sided arthritis of TMJ.
- B. Acute serous left-sided arthritis of TMJ.
- C. Arthrosis of the left TMJ.
- D. Deforming arthrosis of the left TMJ.
- E. Ankylosis of the left TMJ

A. Acute purulent left-sided arthritis of TMJ.

A 46-year-old patient complains about difficult mouth opening, body temperature rise, edematic tissues around both temporomandibular joints. Anamnesis data: 2-3 months ago the patient had undurable mild bilateral pain attacks in the parotidomasticatory areas that lasted for a few days, limited mouth opening, sense of tension and discomfort in some areas of left and right temporomandibular joint. What is the most probable provisional diagnosis?

- A. Rheumatic arthritis.
- B. Infectious arthritis.
- C. Arthrosis.
- D. Fibrous anchylosis.
- E. Deforming arthrosis

A. Rheumatic arthritis.

A 57-year-old patient came to an orthopaedic stomatology center with complaints about dull pain in the area of his right temporomandibular joint that is getting worse during eating. The disease developed gradually, it began with constrained mandibular motion in the morning that sometimes grew more intensive, sometimes less. Objectively: the face is symmetric, the mouth can be opened up to 3 cm. Opening of mouth is accompanied by articular noise and clicking (step-like dislocation of mandible). Skin above the joint is intact. Muscle tone is palpatory unchanged. What is the most probable diagnosis?

- A. Arthrosis of the right temporomandibular joint.
- B. Acute arthritis of the right temporomandibular joint.
- C. Neuromuscular syndrome.
- D. Occlusive articulation syndrome.
- E. Subluxation of mandible.

A. Arthrosis of the right temporomandibular joint.

A 48-year-old woman complains of aching dull pain in the region of the left TMJ, that is getting worse during eating solid food. The pain appeared about 2,5 years ago. Objectively: mouth opening is limited, there is sideward deviation of jaw during mouth opening, TMJ is clicking. Examination of the oral cavity revealed secondary partial adentia. X-ray picture shows sclerosis of the cortical plate of articular head and narrowing of cartilage space. What is the most likely diagnosis?

- A. Arthrosis of the TMJ.
- **B.** Chronic arthritis of the TMJ.
- C. Acute arthritis of the TMJ.
- **D.** Painful dysfunction of the TMJ.
- *E.* Exacerbation of chronic arthritis of the TMJ.

A. Arthrosis of the TMJ.

A 47-year-old patient complains about limited mobility of her lower jaw in the morning; periodical dull pain in the right temporomandibular joint (TMJ) and general joint stiffness. According to the patient, the stiffness disappears throughout the day after joint "exercising". Objectively: the patient's face is symmetric, mouth opening is limited down to 2,5 cm, there is also joint clicking. Median line deviates to the right by 3-4 mm, palpation of the right articular head is painful. What is the most likely diagnosis?

- A. Arthrosis of the right TMJ.
- **B.** Acute serous arthritis of the right TMJ.
- C. Chronic arthritis of the right TMJ.
- **D.** Fracture of the right condyle of mandible.
- E. Right-sided anterior dislocation of mandible.

A. Arthrosis of the right TMJ.

A 37-year-old patient was diagnosed with arthrosis of mandibulotemporal joint. During auscultation the doctor heard pathological rustle in the area of the joint, namely «clicking» that was caused by a load. What is the mechanism of this pathological rustle?

- A. Asynchronous movement of disc and articulation head.
- B. Friction of bone surfaces in the joint.
- C. Loosening of mandibulotemporal joint ligaments.
- D. Calcification of mandibulotemporal joint disc.
- E. Inflammation of cartilaginous tissue of the disc.

A. Asynchronous movement of disc and articulation head

A 47-year-old patient complains about limited mobility of her lower jaw in the morning; periodical dull pain in the right temporomandibular joint (TMJ) and general joint stiffness. According to the patient, the stiffness disappears throughout the day after joint "exercising". Objectively: the patient's face is symmetric, mouth opening is limited down to 2,5 cm, there is also joint clicking. Median line deviates to the right by 3-4 mm, palpation of the right articular head is painless. What is your provisional diagnosis?

- A. Arthrosis of the right TMJ.
- B. Acute serous arthritis of the right TMJ.
- C. Chronic arthritis of the right TMJ
- D. Fracure of the right condyle of mandible.
- E. Right-sided anterior dislocation of mandible.

A. Arthrosis of the right TMJ.

A patient complains about limited mouth opening. She has a history of intraarticular disorders in the left temporomandibular joint. Roentgenological examination revealed subchondral sclerosis of articular plates, regular narrowing of articular cavity, limited excursion of condylar process of the left temporomandibular joint. What is the most likely diagnosis?

- A. Arthrosis of the left temporomandibular joint.
- B. Deforming arthrosis of the left temporomandibular joint.
- C. Ankylosis of the left temporomandibular joint.
- D. Acute purulent left-sided arthritis of the temporomandibular joint.
- E. Acute serous left-sided arthritis of the temporomandibular joint

A. Arthrosis of the left temporomandibular joint

A 46-year-old patient complains of difficult opening of her mouth, body temperature rise, tissue edema around both temporomandibular joints (TMJ). It is known from the anamnesis that the patient had short-term non-intense bilateral pain in the parotid-masticatory region, limited mouth opening, tension and discomfort in the region of both temporomandibular joints that had been observed for a couple of days. What is the most likely diagnosis?

- A. Rheumatic arthritis.
- B. Infectional arthritis.
- C. Arthrosis.
- D. Fibrous ankylosis.
- E. Deforming atrhrosis

A. Rheumatic arthritis

A 57-year-old man came to a dentist with complaints of a dull aching pain in the area of his right temporomandibular joint and morning stiffness of the lower jaw. His condition has a wave-like course throughout the last 3 years. Objectively, the face is symmetrical, the mouth opening is reduce to 3 cm. During the movements of the lower jaw, an articular noise and clicking (step-like displacement of the lower jaw) occur in the area of the right TMJ. The skin over the joint is unchanged. Palpation detects no changes in the muscle tone. What is the most likely diagnosis in this case?

A. Acute arthritis of the right temporomandibular joint

B. Arthrosis of the right temporomandibular joint

- C. Subluxation of the lower jaw
- D. Fibrous ankyloses of the right temporomandibular joint

E. Neuromuscular syndrome

B. Arthrosis of the right temporomandibular joint

M3#3

A 42-year-old patient complains of pain in the right side of her head, restricted movements of the lower jaw, clicking sound, periodic spasms of chewing muscles. Objectively: the face is symmetric, mouth opening is restricted. On palpation of the right temporo-mandibular joint (TMJ) there are crepitation and clicking accompanying mandible movements. Examination of the oral cavity revealed also a Kennedy's class II defect on the right. What is the most likely diagnosis?

- A. Pain dysfunction of the right TMJ.
- **B.** Acute arthritis of the right TMJ.
- C. Sclerosing osteoarthritis of the right TMJ.
- **D.** Contracture of the right TMJ.
- E. Myositis ossificans.

A. Pain dysfunction of the right TMJ.

A 36-year-old patient complains about acute pain, «clicking» in the right temporomandibular joint, burning in the area of her right external acoustic meatus. Movements of her lower jaw are steplike, along with brief blocking moments in the joint and acute pain. Objectively: the face is symmetric. Occlusion is orthognathic, intraoral palpation of lateral pterygoid muscle causes pain on the right. Tomograms show that contours of bone structures of articular surfaces are regular and smooth. What is the most probable diagnosis?

- A. Temporomandibular joint dysfunction.
- B. Rheumatic arthritis of mandibulotemporal joint.
- C. Acute posttraumatic artritis of mandibulotemporal joint.
- D. Deforming arthrosis of mandibulotemporal joint.
- E. Anchylosis of mandibulotemporal joint

A. Temporomandibular joint dysfunction

A 50-year-old patient complains about pain in the region of the left temporomandibular joint (TMJ) during mouth opening. Dental formula is 14, 13, 12, 11, 21, 22, 23, 24, 33, 32, 31, 41, 42, 43, 44. While opening the mouth the lower jaw moves in a zigzag manner towards the affected joint. What pathological condition are these symptoms typical for?

- A. Musculoarticular dysfunction.
- B. Habitual TMJ dislocation.
- C. Sclerosing arthrosis of TMJ.
- D. Chronic arthritis of TMJ.
- E. Deforming arthrosis of TMJ.

A. Musculoarticular dysfunction

A 65-year-old male patient complains about crepitation and clicking in both temporomandibular joints, pain induced by displacement of the lower jaw to the right, ear noise, dry mouth, glossalgia. He has been using complete removable prosthesis of the lower jaw for 6 months. The patient denies rheumatosis. Objectively: the lower third of face is shortened, mental fold is strongly pronounced, mouth corners are lowered, angular fissures and cracks are also present. Palpation reveals crepitation rale observed during TMJ moving. What is the most likely diagnosis?

- A. Costen's syndrome.
- B. Temporomandibular arthritis.
- C. Temporomandibular arthrosis.
- D. Temporomandibular dislocation.
- E. Temporomandibular osteoarthritis.

A. Costen's syndrome.

A 38-year-old female patient complains about pain in projection of the external acoustic meatus, clicking during mouth opening, ear stuffiness. Objectively: the face is symmetric, mouth is opened in staright path. There is Kennedy I type dentition defect, the 18, 17, 16, 26, 27, 28 teeth are missing. What anatomical formation carries the maximum load?

- A. Articular disk (meniscus).
- B. Articular head.
- C. Distal clivus of medial articular tubercle.
- D. Glenoid fossa floor of temporal bone.
- E. Joint capsule.

A. Articular disk (meniscus).

A 62-year-old woman presents with reduced occlusal height, which makes madibular condyles press on the vault of the articular fossa, the auriculotemporal nerve, and the chorda tympani. What disease can be caused by the clinical presentation? A. Intra-articular ankylosis
B. Pierre Robin syndrome
C. Arthrogenic mandibular contracture
D. Juvenile temporomandibular joint dysfunction
E. Costen`s syndrome

E. Costen`s syndrome

A 52-year-old man complains of pain and clicking in the area of his left temporomandibular joint. Objectively, the face is symmetrical, palpation of the medial and lateral pterygoid muscles is painful on the left. The mouth opening is limited to 1,5 cm between the cutting edges of the central incisors. X-ray shows smooth contours of the articular surfaces, the joint space is normal. What is the most likely diagnosis in this case? A.Deforming arthrosis

B. Rheumatoid arthritis

C. Acute post-traumatic arthritisD. Fibrous ankylosis of the jointE. Neuromuscular joint syndrome

E. Neuromuscular joint syndrome

M5#4

After complex extraction of the 37 tooth a patient experienced anaesthesia of the left half of his lower lip and chin. Electroodontodiagnos showed reduction of lower jaw teeth electroexcitability on the left. What is the most likely diagnosis?

- A. Neuralgia of the left inferior alveolar nerve.
- **B.** Neuritis of the left inferior alveolar nerve.
- C. Alveolitis in the region of socket of the 37 tooth.
- D. Herpes Zoster n. Trigemini.
- E. Acute osteomyelitis of mandible body.

A. Neuritis of the left inferior alveolar nerve.

A 30-year-old patient consulted a dentist about dull pain, numbress in the lower teeth, the lower lip and chin on the right. Anamnesis data: the problems arose a week ago after the extraction of an impacted wisdom tooth on the right lower jaw. The patient developed the following disease:

- A. Neuritis of the inferior alveolar nerve.
- **B.** Neuralgia of the third branch of the trigeminal nerve.
- C. Neuritis of the facial nerve.
- **D.** Neuralgia of the auriculotemporal nerve.
- E. Neuritis of the trigeminal nerve.

A. Neuritis of the inferior alveolar nerve.

A 52-year-old female patient complains of severe paroxysmal pain in the region of the 34 tooth. Throughout the year the 35, 36, 37 teeth were sequentially extracted because of pain complaints. Percussion of the 34 tooth causes acute paroxysmal pain. The same pain arises when talking and washing the projection area of the mental foramen. Clinical and roentgenologic examination revealed no signs of bone tissue destruction. What is the most likely diagnosis?

- A. Neuralgia of the 3 branch of trigeminus.
- **B.** 34 tooth pulpitis.
- C. Facial nerve neuritis.
- **D.** Ganglionitis of pterygopalatine ganglion.
- E. Neuritis of the 3 branch of trigeminus.

A. Neuralgia of the 3 branch of trigeminus.

A 42-year-old patient consulted a dentist about intense lancinating paroxysmal pain accompanied by a sensation of current passage in the region of her upper lip on the right. Pain attacks occur spontaneously and last 3-5 minutes. The patient usually has 2-3 attacks a day. The patient is unable to establish the cause of this disease. Examination of her oral cavity revealed no pathological changes. Oral cavity is sanitated. Test orthopantomogram shows an impacted supernumerary 13 tooth. What is the most likely diagnosis?

- A. Peripheral neuralgia of the II branch of trigeminus.
- **B.** Pterygopalatine ganglionitis.
- C. Neuritis of the II branch of trigeminus.
- D. Central neuralgia of the II branch of trigeminus.
- E. Right-sided upper jaw pulpitis.

A. Peripheral neuralgia of the II branch of trigeminus.

A 42-year-old patient consulted a dentist about intense lancinating paroxysmal pain accompanied by a sensation of current passage in the region of her upper lip on the right. Pain attacks occur spontaneously and last 3-5 minutes. The patient usually has 2-3 attacks a day. The patient is unable to establish the cause of this disease. Examination of her oral cavity revealed no pathological changes. What is the most likely diagnosis?

- A. Peripheral neuralgia of the II branch of trigeminus.
- B. Pterygopalatine ganglionitis.
- C. Neuritis of the II branch of trigeminus.
- D. Central neuralgia of the II branch of trigeminus.
- E. Right-sided upper jaw pulpitis

A. Peripheral neuralgia of the II branch of trigeminus.

A 62-year-old woman complains of intense pain attacks in the area of her left lower jaw that last 1-3 minutes. The pain occurs during talking, washing her face, and touching the skin. Mandibular x-ray detects no pathological changes in the bone tissue. Make the provisional diagnosis.

- A. Neuralgia of the second branch of the trigeminal nerve
- B. Facial nerve neuritis
- C. Pterygopalatine ganglionitis
- D. Neuritis of the third branch of the trigeminal nerve
- E. Neuralgia of the third branch of the trigeminal nerve

E. Neuralgia of the third branch of the trigeminal nerve

A 30-year-old woman complains of problems with mimics on the right side of her face and a fever of 37.9°C. The signs developed after an overexposure to cold. Objectively, the patient cannot wrinkle her forehead on the right or close her right eye, supraorbital reflex on the right is absent, the right nasolabial fold is smoothed-out. What pathology is it?

A.–

B. Neuritis of the facial nerve

C. Hemifacial spasm

D. Progressive facial hemiatrophy

E. Trigeminal neuralgia

B. Neuritis of the facial nerve

A 43-year-old man complains of the sharp pulsing pain in the area of the right upper jaw. The pain appeared three days ago. Objectively, an inflamed round infiltration can be palpated on the vestibular surface of the gingival mucosa of tooth 16, closer to the gingival margin. The tooth is intact, with the II degree of mobility. Its horizontal and vertical percussion is painful. Periodontal pockets are 4-5 mm deep. What is the most likely diagnosis?

A. Periodontal abscessB. Acute purulent periodontitisC. Maxillary periodontitisD. Exacerbation of chronic periodontitisE. Acute serous periodontitis

A. Periodontal abscess

M5#5

After unilateral resection of the upper jaw a 52-year-old patient received the immediate-insertion denture. What is the term of its use?

Variants of answers

- **A.** 1-3 months.
- **B**. 1-2 months.
- **C**. 7-12 months.
- D. 2-3 years.
- **E**. 4-5 years.

Correct answer

A. 1-3 months.

A 22-year-old patient presented to a prosthetic dentistry clinic because of missing of the 21 tooth, the 11 and 22 teeth are intact. The 21 tooth was extracted 2 months ago. What construction is most suitable in this case?

Variants of answers

- A. Two-stage implantation.
- B. One-stage implantation with simultaneous fabrication of porcelainfused-to-metal crown.
- C. Partial removable denture.
- D. Swaged and soldered denture supported by the 11 and 22 teeth.
- E. Metal-plastic denture supported by the 11 and 22 teeth.

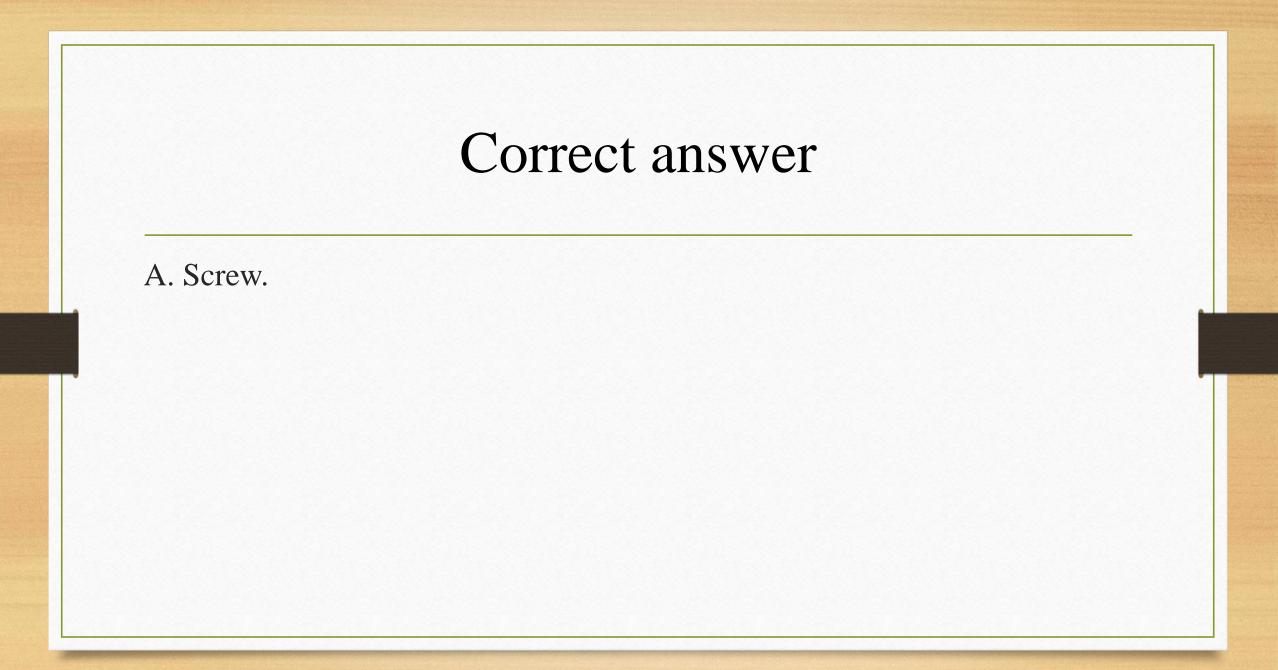
Correct answer

A. Two-stage implantation.

A 50-year-old patient has a defect of his lower dentition. It is planned to make a bridge denture supported by implants. X-ray picture showed that the height of osseous tissue mass from projection of mandibular canal to the top of alveolar crest was 2 cm. What implant will be recommended?

Variants of answers

- A. Screw.
- B. Endodonto-endoossal.
- C. Leaflike.
- D. Subperiosteal.
- E. Conical.



44-year-old man came to a dental implantation in the area of missing teeth 15, 16, and 17. What is the minimum period for complete osseointegration of the implants into the upper jaw?

A. 6 months
B. 1 month
C. 9 months
D. 12 months
E. 3 months

A. 6 months