Standardized Tools for Assessment of Bruxism

STAB

Toolkit of Full Instruments

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Standardized Tool for Assessment of Bruxism (STAB)

Basic Information Questionnaire

Sex:
Male
Female
Unspecified/Other

Age **Height** **Weight**

What is your current marital status?
Married
Living as married
Divorced
Separated
Widowed
Unmarried

What is the highest grade or level of schooling that you have completed?
Compulsory school (<16 years old)
Secondary school (e.g. high school) up to 18 years
University enrolled or incomplete (no degree)
University graduate
Post-Graduate level

Axis A- Assessment of the Condition and Consequences of Bruxism

Subject-Based Assessment (SBA)

Self-Report

A1. Sleep Bruxism report

A1.1 Sleep Bruxism Question

How often do you clench or grind your teeth when asleep based on the last month (based on any information you may have

None of the time
Less than 1 night/month
1-3 nights/month
1-3 nights/week
4-7 nights/week
Don't know

A1.1.1 Sleep Bruxism History Questions

To the best of your knowledge, have you clenched or grind your teeth during sleep in the past?

No
Yes
Don't know

A2. Awake Bruxism Report

A2.1 Awake Teeth Grinding Questions

How often did you grind your teeth together during waking hours based on the the last month?

None of the time
A little of the time
Some of the time
Most of the time
All of the time
Don't know

A2.1.1 Awake Teeth Grinding History Question

Did you use to grind your tooth together during waking hours in the past?

No
Yes
Don't know

A2.2 Awake Teeth Clenching Question

How often did you clench your teeth together during waking hours,based on the last month?

None of the time
A little of the time
Some of the time
Most of the time
All of the time
Don't know

A2.2.1 Awake Teeth Clenching History Question

Did you use to clench your teeth together during waking hours in the past?

No
Yes
Don't know

A2.3 Awake Teeth Contact Question

How often did you press, touch, or hold your teeth together (the contact between upper and lower teeth) when not eating based on the last month?

None of the time
A little of the time
Some of the time
Most of the time
All of the time
Don't know

A2.3.1 Awake Teeth Contact History Question

Did you use to press, touch, or hold your teeth together (the contact between upper and lower teeth) when you're not eating in the past?

No

Yes

Don't know

A2.4 Awake Tightened Mandible Question

How often did you hold, tighten or tense your muscles without clenching or bring teeth together,based on the last month?

None of the time

A little of the time

Some of the time

Most of the time

All of the time

Don't know

A2.4.1 Awake Tightened Mandible History Question

Did you use to hold, tighten, or tense your muscles without clenching or bringing teeth together in the past?

No

Yes

Don't know

A3. Patient's complaint

Temporomandibular Disorders

A3.1 TMD Pain

How long did the pain in your jaw or temple area on either side last in the last 30 days?

No pain

Pain comes and goes

Pain is always present

A3.2 Pain or Stiffness on Awakening

In the last 30 days, did you feel pain or stiffness in your jaw on awakening?

No

Yes

A3.3 Joint Lock

In the last 30 days, have your jaw locked or stuck (even for a moment), so it would not fully open?

No

Yes

A3.4 Pain Changes With Jaw Movements

In the last 30 days, did the following activities change any pain (that is, make it better or make it worse) in your jaw or temple on either side?

Chewing hard or tough food

Opening your mouth or moving your jaw forward or to the side

Jaw habits(e.g., holding teeth together, clenching, grinding, chewing gum)

Other jaw activities such as talking, kissing, or yawning

A3.5 Jaw Joint Noises

In the last 30 days, have you heard any jaw joint noises when moving or using your jaw?

No

Yes

A3.6 Waketime Muscle Pain

In the last 30 days, did you have jaw muscle pain during any of the following times of the day?

Between waking up and breakfast

Between breakfast and lunch

Between lunch and dinner

Between dinner and bedtime

A3.6.1 Waketime Muscle Tiredness or Fatigue

In the past 30 days, did you have stiffness, sensitivity, tiredness, or fatigue of the jaw muscles during any of the following times in the day?

Between waking up and breakfast
Between breakfast and lunch
Between lunch and dinner
Between dinner and bedtime

A3.7 Awakening Symptom Question

Do you experience any of the following symptoms on awakening?

Feeling of fatigue, soreness or tightness of your jaw
Feeling that your teeth are clenched or that your mouth is sore
Pain in the temples
Feeling tension in the jaw joint on awakening so that you have to move the jaw to release the tension
Difficulty in opening mouth wide upon awakening
Hearing a click in the jaw joint on awakening that disappear afterwards

Headache

A3.8 Headache

In the past 30 days, have you had any headache that included the temple areas of your head?

No
Yes
If yes, how many days?

Tooth wear

A3.9 Tooth wear

Do you have the following symptoms due to tooth wear?

Sensitivity and/or pain
Functional problems (difficulties chewing and eating)
Aesthetic issues (less attractive due to the teeth appearance)
Damage of dental hard tissue and restorations
Phonetic impairment

Tinnitus

A3.10 Tinnitus

Do you have noise or ringing in your ears (tinnitus)?

No
Yes

Xerostomia and Drooling

A3.11 Xerostomia

Do your mouth feel dry?

Never
Occasionally

Often

A3.12 Drooling

Do you feel that you drool at night?

I don't drool at night

My pillow sometimes gets wet at night

My pillow regularly gets wet at night

My pillow always gets wet at night

My pillows and sheets get wet every night

Clinically Based Assessment (CBA)

Examiner's Report (For Examiner’s Use)

A4. Joints and muscles
A4.1 Diagnosis of TMD (optional item)
Mark the following diagnoses that occur

A4.1.1. Pain Disorder*.
*Fill this section only if item A3.3 (TMD Pain Screening) is positively confirmed by the patient
Myalgia
Myofascial pain with spreading
Myofascial pain with referral
Right arthralgia
Left arthralgia
Headache attributed toTMD

A4.1.2. Right-sided Temporomandibular Joint Disorder*
*Please specify if the diagnosis is based upon clinical or imaging evaluation
Disc displacement with reduction
Disc displacement with reduction, with intermittent locking
Disc displacement without reduction with limited opening
Disc displacement without reduction without limited opening
Degenerative joint disease
Subluxation

A4.1.3. Left-sided Temporomandibular Joint Disorder*
*Please indicate whether the diagnosis is based on clinical or imaging evaluation
Disc displacement with reduction
Disc displacement with reduction, with intermittent locking
Disc displacement without reduction with limited opening
Disc displacement without reduction without limited opening
Degenerative joint disease
Subluxation

A4.2 Masseter Muscle Hypertrophy
Please mark the presence of masseter muscle hypertrophy
left
right

A5. Intraoral and extraoral tissues

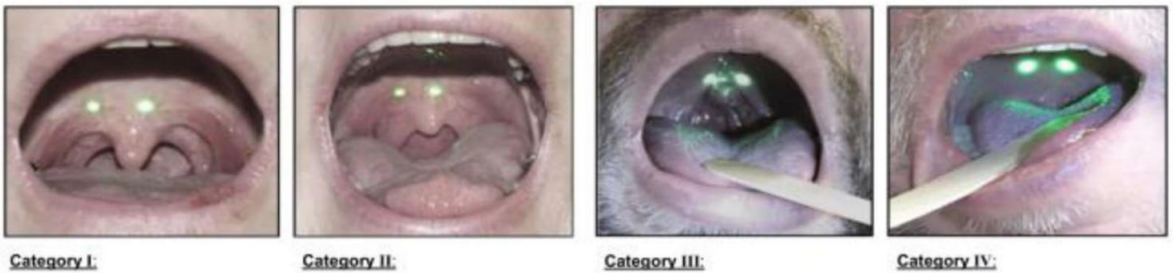
A5.1 Soft and Bone Tissues

Please mark the presence of the following signs:

Linea alba	Left	Right	
Lip impression	Upper	Lower	
Scalloped Tongue	Right	Front	Left
Tongue ulceration*	Right	Front	Left
Alveolar bone exostosis	Mandible (buccal/lingual)		Maxilla (buccal/lingual/mid palatal)

*If positive for firm , indurated, and rolled borders - a warning for further urgent examination

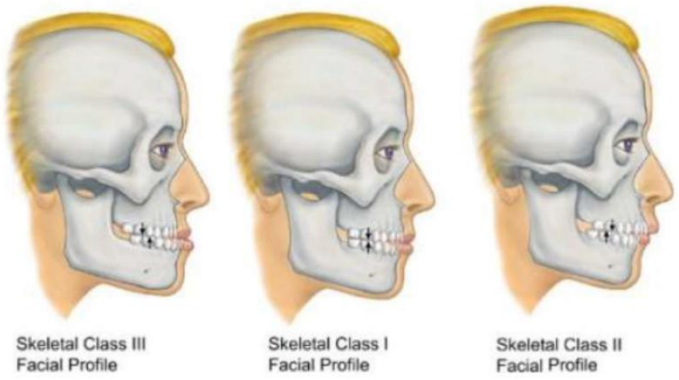
A5.2 Modified Friedman Grading



Category I: no phonation/tongue depressor: uvula and palatal arch visible
Category II: with phonation, uvula and palatal arch visible
Category III: with tongue depressor, uvula and palatal arch visible
Category IV: with phonation,/tongue depressor, uvula and palatal arch not visible

A5.3 Classification of Skeletal Facial Patterns (Optional Item)

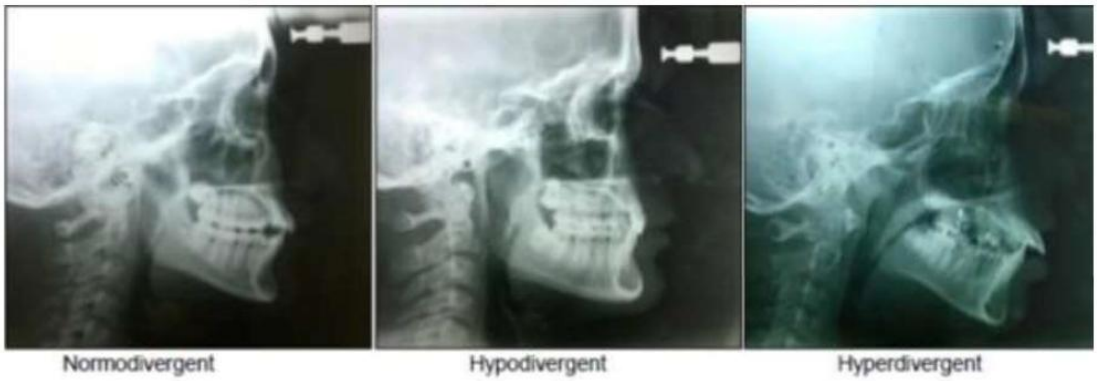
Class I
Class II
Class III



A5.4 Lateral Cephalometric Images (Optional Item)

Normodivergent profile (medium gonial angle)

Open lateral profile (low gonial angle)
Convergent lateral profile (high gonial angle)



Normodivergent Hypodivergent Hyperdivergent

A6. Teeth and Restorations

A6.1 Screening for Tooth Wear - Quantitative Examination

Mark the highest score for tooth wear per sextant

	Sextant1	Sextant2	Sextant3	Sextant4	Sextant5	Sextant6
Occlusal/Incisal						
Palatal						

A.6.1.1 Tooth Wear Qualification*

*Qualification is required when a quantitative score of ≥ 2 is detected.

Clinical signs indicating the influence of mechanical factors:

Tooth surfaces are shiny, flat, and smooth
Enamel and dentin wear at the same rate
Occlusal surface wear that matches the wear characteristics of the opposing teeth
Fracture of cusps or restorations
Indentation in buccal mucosa, tongue, lips
Located at cervical areas of the teeth, Non-Carious Cervical Lesions (NCCL)
Buccal /cervical lesions more wide than deep, Non Carious Cervical Lesions (NCCL)
Cervical areas of premolars and cuspids are affected
Cracks in the enamel
Protruded mandibulae

A6.2 Periodontal and Dental Examination

Indicate the number of teeth labeled with the following signs

	Sextant1	Sextant2	Sextant3	Sextant4	Sextant5	Sextant6
Mobility						
Thermal Sensitivity						
Discomfort/pain on biting						
Fractured teeth						

A6.3 Restorations

Indicate the number of teeth/implants labeled with the following signs

	Sextant1	Sextant2	Sextant3	Sextant4	Sextant5	Sextant6
Lost/broken fillings						
Cracks in restorations						
Ceramic fractures						

Mobile implant						
Implant fractures						
Implant screw loosening						

A6.4 Evaluation of Intraoral Devices (if hard resin splint is used by the patient)

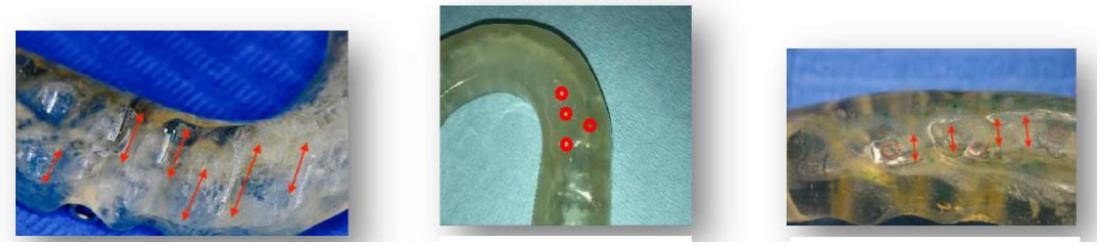
Mark the presence of the following signs:

Prevalence of grinding marks (i.e., streaks) Right Front Left

Prevalence of clenching marks (i.e., circle-shaped dots) Right Front Left

Combination of grinding and clenching marks Right Front Left

Fractures or perforations Right Front Left



Example of grinding marks Example of clenching marks Example of combined marks

Instrument-Based Assessment (IBA)

Technology Report

A7. Sleep Bruxism

A7.1 Electromyography

Number of masseter events over 10% MVC

Bruxism time index (if available)

Bruxism work index (if available)

A7.2 Polysomnography (optional)

Number of arousal-related SB events

Number of arousal-unrelated SB events

Bruxism time index (if available)

Bruxism work index (if available)

A7.3 Other Methods (optional)

Score teeth grinding sounds via smartphone application

A7.4 Pressure Sensor (optional)

Number of events of bite pressure

A8. Awake Bruxism

A8.1 Ecological Momentary Assessment - one week report

Condition	In Week 1 （%）	In additional weeks （%）
Relaxed jaw muscles (no teeth contact)		
Tightened jaw muscles (no teeth contact)		
Teeth contact (light steady contact)		
Teeth clenching (strong steady contact)		
Teeth grinding		

A8.2 Waketime Electromyography

Number of masseter events exceeding 10% MVC

Bruxism time index

Bruxism work index

A8.3 Other Methods: To be determined

A9. Additional instruments

A9.1. Intraoral Acidity (optional)

Rest salivary PH

Rest saliva flow

Stimulated salivary PH (chewing paraffin)

Stimulated salivary flow

Axis B - Risk, Etiologic Factors and Comorbid Conditions

B1. Psychosocial Assessment
Self-Report

B1.1 Anxiety and Depression Screening

In the last two weeks, how often have you been bothered by the following problems?

1. Feeling nervous, anxious or on edge
Not at all
For a few days
More than half the time
Nearly every day

2. Not being able to stop or control worrying
Not at all
A few days
More than half the time
Nearly every day

3. Little interest or pleasure in doing things
Not at all
A few days
More than half the time
Nearly every day

4. Feeling down, depressed, or hopeless
Not at all
A few days
More than half the time
Nearly every day

B1.2 Coping

Consider how well the following statements describe your behaviors and actions

1. I look for creative ways to solve problems

Does not describe me

Does not describe me to some extent

Describes me

Describes me well

Describes me perfectly

2. Regardless of what happens to me, I believe can control my reaction to it

Does not describe me

Does not describe me to some extent

Describes me

Describes me well

Describes me perfectly

3. I believe I can grow by positively dealing with difficulties

Does not describe me

Does not describe me to some extent

Describes me

Describes me well

Describes me perfectly

4. I will actively look for ways to make up for the losses I have encountered in my life

Does not describe me

Does not describe me to some extent

Describes me

Describes me well

Describes me perfectly

B2. Assessment of Concurrent Sleep Conditions

Self-Report

B2.1 Sleep Apnea Syndrome Screening

Please mark the following questions with a positive answer

Do you snore loudly?

Do you often feel tired, fatigued and sleepy during the day?

Has anyone observed you stop breathing or choking/wheezing during sleep?

Do you have or are being treated for high blood pressure?

Do you have a BMI more than 35?

Are you older than 50 years old?

Neck circumference size large (>43cm for men; >41cm for women)

Gender = male?

B2.2 Screening for Insomnia

Indicate which of the following statements may be applied to you

I have difficulty falling asleep

I have a lot of thoughts and have trouble falling asleep

I usually have problems with sleep a few times a week

I wake up and cannot go back to sleep

I worry about things and have trouble relaxing

I wake up earlier in the morning than I would like to

I lie awake for half an hour or more before falling asleep

B2.3 Periodic Limb Movement Disorder and Restless Legs Syndrome Screening

Indicate which of the following statements can be applied to you

I still feel muscle tension in my legs when not exercising

I notice (or have been told) that a part of my body twitches during sleep

I have been told that I kick at night

My legs always feel sore or aching when I try to go to sleep

I experience pain or cramps in my legs at night

Sometimes my leg won't stay still and I have to move it to make myself comfortable

Despite sleeping at night, I am still sleepy during the day

B2.4 Oral Behavior - Sleeping Position

In the past month, how often did your sleeping position cause pressure on your jaw?

None of the time

A little of the time

Some of the time

Most of the time

All of the time

Don't know

B3. Assessment of Concurrent Non-Sleep Conditions
Self-Report

B3.1 Oral Behavior - Activities on Awakening
How often do you do each of the following activities, based on the last month?

Q7.Hold or jut jaw forward or to the side
None of the time
A little of the time
Some of the time
Most of the time
All of the time
Don't know

Q8.Press tongue forcibly against teeth
None of the time
A little of the time
Some of the time
Most of the time
All of the time
Don't know

Q9.Place tongue between teeth
None of the time
A little of the time
Some of the time
Most of the time
All of the time
Don't know

Q10.Bite,chew or play with your tongue,cheeks or lips
None of the time
A little of the time
Some of the time
Most of the time
All of the time
Don't know

Q11.Hold jaw in rigid or tense position,such as to brace or protect the jaw
None of the time
A little of the time
Some of the time
Most of the time
All of the time

Don't know

Q12.Hold between the teeth or bite objects such as hair,pipe,pencil,pens,fingers,fingernails etc
None of the time
A little of the time
Some of the time
Most of the time
All of the time
Don't know

Q13.Use chewing gum
None of the time
A little of the time
Some of the time
Most of the time
All of the time
Don't know

Q14.Play musical instrument that involves use of mouth or jaw
None of the time
A little of the time
Some of the time
Most of the time
All of the time
Don't know

Q15.Lean with your hand on the jaw,such as cupping or resting the chin in the hand
None of the time
A little of the time
Some of the time
Most of the time
All of the time
Don't know

Q16.Chew food on one side only
None of the time
A little of the time
Some of the time
Most of the time
All of the time
Don't know

Q17.Eating between meals
None of the time

A little of the time
Some of the time
Most of the time
All of the time
Don't know

Q18.Sustained talking(e.g.,teaching,sales,customer services)
None of the time
A little of the time
Some of the time
Most of the time
All of the time
Don't know

Q19.Singing
None of the time
A little of the time
Some of the time
Most of the time
All of the time
Don't know

Q20.Yawning
None of the time
A little of the time
Some of the time
Most of the time
All of the time
Don't know

Q21.Hold telephone between your head and shoulders
None of the time
A little of the time
Some of the time
Most of the time
All of the time
Don't know

B3.2 Smartphone Use (optional item)
Indicate average time/day of smartphone use

B3.3 Orofacial Motor disorders
Have you been diagnosed with or do you have symptoms associated with any of the following conditions?

Orofacial Dyskinesia
Mandibular Dystonia
Parkinson's Disease
Huntington's Disease
Tourette's Syndrome
Facial Muscle Spasms
Tardive Dyskinesia

B3.4 Gastroesophageal Reflux Disease Screening
How many times a week do you experience the following symptoms?

A. Burning sensation behind the sternum (heartburn)
0 Days
1 Day
2-3 Days
4-7 Days

B. Stomach contents moving upward to the throat or mouth (regurgitation)
0 Days
1 Day
2-3 Days
4-7 Days

C. Pain in the middle or upper abdomen
0 Days
1 Day
2-3 Days
4-7 Days

D. Nausea
0 Days
1 Day
2-3 Days
4-7 Days

E. Difficulty getting a good sleep due to heartburn and regurgitation
0 Days
1 Day
2-3 Days
4-7 Days

F. Need for over-the-counter medicine for heartburn and regurgitation
0 Days

1 Day
2-3 Days
4-7 Days

B3.5 Screening for Autoimmune or Connective Tissue Diseases

Have you been diagnosed with one of the following conditions?

Rheumatoid Arthritis
Lupus
Other systemic rheumatic diseases, including fibromyalgia
Other systemic conditions, including systemic sclerosis, rheumatic polymyalgia, mixed connective tissue disease

B3.6 Attention Deficit Hyperactivity Disorder (ADHD)

Have you been diagnosed with Attention Deficit Hyperactivity Disorder?

No
Yes

B4. Assessment of Prescription and Other Medicine
Self Report

B4.1 Drugs

Mark if you use recreational or street drugs

If yes, please state which drugs you use for recreational purposes

B4.2 Medications

Are you currently under one of the following medications?

Antidepressants (e.g., selective serotonin reuptake inhibitors)

Benzodiazepines

Neuroleptics,Antipsychotics, antiemetics (dopamine antagonists)

ADHD medication

Anti-allergy medication

Medical marijuana CBD

Medical marijuana TSH

Opioids

Other

If yes, list all medications and dosages

B4.3 Tobacco

Do you smoke or use any tobacco products?

No

Yes

Quit

If yes, how many cigarettes do you smoke per day?

B4.4 Alcohol

Have you ever consumed alcoholic beverages (beer, wine, hard liquor, etc.)?

No

No

Quit

If yes, what is your approximate intake of the alcoholic beverages(glasses/day)?

B4.5 Soft Drinks

Do you regularly drink soft drinks (e.g. Coke/Red Bull/Sprite/Fenta, etc.)?

No

Yes

Quit

If yes, what is your approximate intake (glasses/day)?

B4.6 Juices and Fruits

Do you regularly drink juices or citrus fruits (e.g. lemons, oranges, grapefruit, etc.)?

No

Yes
Quit
If yes, what is your approximate intake (glasses/day)?

B4.7 Caffeinate

Do you regularly drink coffee, tea or other caffeine beverages?
No
Yes
Quit
If yes, what is your approximate intake (cups/day)?

B5. Assessment of Other Factors

B5.1 Screening for Family History of Bruxism

Do you know anyone in your family (e.g., father, mother, child) who has had a history of bruxism?

No

Yes Father/Mother/Son/Daughter/Grandfather/Grandmother

Don't know

B5.2 Screening for Family History of Tooth Wear

Do you know anyone in your family (e.g., father, mother, child) who has had a history of tooth wear?

No

Yes Father/Mother/Son/Daughter/Grandfather/Grandmother

Don't know

B5.3 Screening for Family History of Sleep Apnea Syndrome

Do you know anyone in your family (e.g., father, mother, child) who has had sleep apnea syndrome?

No

Yes Father/Mother/Son/Daughter/Grandfather/Grandmother

Don't know

B5.4 Screening for Family History of Orofacial Pain

Do you know of anyone in your family (e.g., father, mother, child) who has had orofacial pain?

No

Yes Father/Mother/Son/Daughter/Grandfather/Grandmother

Don't know

B5.5 Screening for Family History of Gerd

Do you know anyone in your family (e.g., father, mother, child) who has had gastroaesophageal reflux disease?

No

Yes Father/Mother/Son/Daughter/Grandfather/Grandmother

Don't know