Appendix 2

Standardised Tool for the Assessment of Bruxism

STAB

Full version

English Version

Agust 2022

Index

Standardized Tool for the Assessment of Bruxism

(STAB)

Demographics Questionnaire

Sex
Male
Female
Unspecified /Other

Age **Height** **Weight**
_____ **_____** **_____**

What is your current marital status?
Married
Living as married
Divorced
Separated
Widowed
Never married

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

Axis A – Assessment of bruxism status and consequences

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 one night/month
1-3 nights/month
1-3 nights/week
4-7 nights/week
Don't know

A1.1.1 SLEEP BRUXISM HISTORY QUESTION

Did you use to clench or grind your teeth when asleep in the past, based on any information you have?

No
Yes
Don't know

A2. Awake Bruxism Report

A2.1 AWAKE TEETH GRINDING QUESTION

How often do you grind 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

A2.1.1 AWAKE TEETH GRINDING HISTORY QUESTION

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

No
Yes
Don't know

A2.2 AWAKE TEETH CLENCHING QUESTION

How often do 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 do you press, tuch, or hold your teeth together other than while eating (that is,contact between upper and lower teeth), 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 other than while eating (that is, contact between upper and lower teeth) in the past?

No
Yes
Don’t know

A2.4 AWAKE MANDIBLE **BRACING QUESTION**
How often do you hold, tighten, or tense your muscles without clenching or bringing 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 MANDIBLE BRACING 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 complaints

TEMPOROMANDIBULAR DISORDERS

A3.1 TMD PAIN

In the last 30 days, how long did any pain last in your jaw or temple area on either side?

No pain
Pain comes and goes
Pain is always present

A3.2 PAIN OR STIFFNESS ON AWAKENING

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

No
Yes

A3.3 CLOSED LOCK

In the last 30 days, have you had your jaw locked or caught, even for a moment, so it would not open ALL THE WAY?

No
Yes

A3.4 PAIN CHANGE WITH ACTIVITIES

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 had any jaw joint noise(s) when you moved or used 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 last 30 days, did you have jaw muscle stiffness or sensation or tiredness or fatigue during any of the following periods of the day?

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

A3.7 AWAKENING SYMPTOMS QUESTION
Are you aware of any of the following symptoms upon awakening**?**

Sensation of fatigue, soreness or tightness of your jaw
Feeling that your teeth are clenched or that your mouth is sore
Aching of your temples
Feeling of tension in your jaw joint upon awakening and feeling that you have to move your lower jaw to release it
Difficulty in opening mouth upon waking
Hearing or feeling a click in your jaw joint upon awakening that disappears afterward

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 experience any of the following symptoms because of the existing tooth wear?

Sensitivity and/or pain
Functional problems (difficulties chewing and eating)
Deterioration of esthetic appearance (compromised dental attractiveness)
Crumbling of dental hard tissue and restorations
Phonetic impairment

TINNITUS

A3.10 TINNITUS
Do you have noises or ringing in your ears (tinnitus)?
No
Yes

XEROSTOMIA E DROOLING

A3.11 XEROSTOMIA

Does your mouth feel dry?

Never
Occasionally
Often

A3.12 DROOLING

Do you experience loss of saliva during the night?

I do not experience loss of saliva during the night at all
My pillow sometimes gets wet during the night
My pillow regularly gets wet during the night
My pillow always gets wet during the night
Every night my pillow and other bedclothes get wet

Clinically Based Assessment (CBA)
Examiner's Report (FOR EXAMINER'S USE)

A4. Joints and muscles

A4.1 TMD DIAGNOSES (Optional Item)
Mark the presence of the following diagnoses

A4.1.1. PAIN DISORDERS*
*Please fill this section only if the item A3.3 (TMD Pain Screener) is positively endorsed by the patient
Myalgia
Myofascial pain with spreading
Myofascial pain with referral
Right arthralgia
Left arthralgia
Headache attributed to TMD

A4.1.2. RIGHT TMJ DISORDER *
* Please specify whether the diagnosis is based on clinical or radiological 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 TMJ DISORDER *
Please specify if diagnosis is based upon clinical or imaging assessment
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 **HYPERTROPHIA**
Mark **the presence of masseter muscle hypertrophia**:
Left
Right

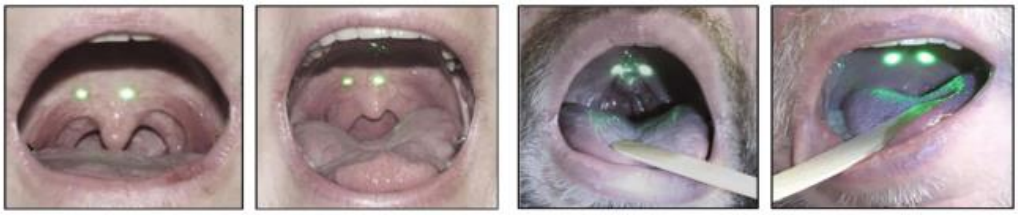
A5. Intraoral and Extraoral Tissues

A5.1 SOFT AND BONE TISSUE

Mark the presence of the following signs:

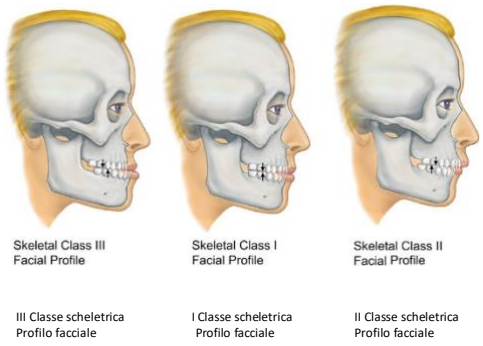
Linea alba Left Right
Lip impression Upper Lower
Tongue scalloping Right Front Left
Tongue ulceration* Right Front Left
Alveolar bone exostosis Mandible (Buccal/Lingual) Maxilla (Buccal/Lingual/Midpalatal)
*If positive for firm, indurated, rolled borders – red flag for further urgent investigation

A5.2 MODIFIED FRIEDMAN TONGUE POSITION



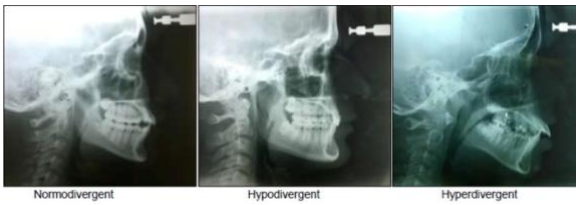
A5.3 SKELETAL CLASS (Opzional Item)

Class 1
Class 2
Class 3



A5.4 SKELETAL PROFILE (Optional)

Normodivergent profile (medlium gonial angle)
Hypodivergent profile (low gonial angle)
Hyperdivergent profile (high gonial angle)



A6. Teeth and restorations

A6.1 TOOTH WEAR SCREENING **– QUANTIFICATION**

Indicate the highest tooth wear score per sextant

	Sextant 1	Sextant 2	Sextant 3	Sextant 4	Sextant 5	Sextant 6
Occlusal / Incisal						
Palatal						

A.6.1.1 TOOTH WEAR QUALIFICATION *

*When during quantification a grade ≥ 2 is detected, qualification is needed.

Clinical signs indicating the influence of mechanical factors:

Shiny facets, flat and glossy
Enamel and dentin wear at the same rate
Matching wear on occluding surfaces, corresponding features at the antagonistic teeth
Fracture of cusps or restorations
Impressions in cheek, tongue and/or lip
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 within the enamel
Torus Mandibulae

A6.2 PERIODONTAL AND DENTAL EXAMINATION

Indicate the number of teeth with the following signs

	Sextant 1	Sextant 2	Sextant 3	Sextant 4	Sextant 5	Sextant 6
Mobility						
Thermal sensitivity						
disconfort / pain on biting						
Fractured teeth						

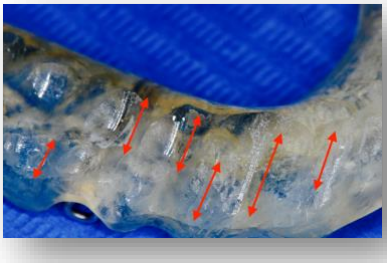
A6.3 RESTORATIONS

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

	Sextan 1	Sextan 2	Sextan 3	Sextan 4	Sextan 5	Sextan 6
lost/broken fillings						
Scratched restorations						
Ceramic fractures						
Mobile implants						
Implant Fractures						
Implant screw loosening						

A6.4 ORAL APPLIANCE EVALUATION (If hard resin splint is used by the patient)
Mark the presence of the following signs:

Prevalence of grinding marks (i.e., stripes) Right Front Left
Prevalence of clenching marks (i.e., circle-like spots) Right Front Left
Combination of grinding and clenching marks Right Front Left
Fractures or perforations Right Front Left

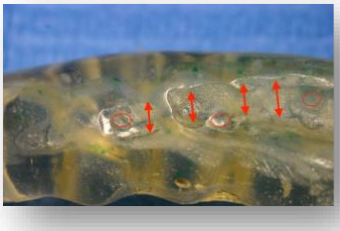


Example of grinding marks

Esempio di segni di digrignamento

Example of clenching marks.

Esempio di segni di serramento dentale



Example of combined marks.

Esempio di segni combinati

Instrumentally Based Assessment (IBA)
Technology Report

A7. Sleep Bruxism

A7.1 ELECTROMYOGRAPHY

Number of masseter events greater than 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)

Smartphone application score for grinding sounds

A7.4 APPLIANCE WITH SENSORS (Optional)

Number of events of bite pressure

A8. Awake Bruxism

A8.1 ECOLOGICAL MOMENTARY ASSESSMENT – One week report

CONDITION	**Week 1 (in %)**	Additional **week(s) (in %)**
relaxed Jaw muscles (no teeth contact))		
Mandible bracing (no teeth contact)		
Teeth Contact (light steady touching)		
Teeth Clenching (strong steady touching)		
Teeth grinding		

A8.2 ELECTROMYOGRAPHY WHILE AWAKE

Number of masseter events over 10% MVC _____
Bruxism time index (if available) _____
Bruxism work index (if available) _____

A8.3 OTHER METHODS: To be determined

A9. Additional instruments

A9.1. Intraoral Acidity (Optional)

REST SALIVARY PH _____
REST REST SALVIARY FLOW _____
STIMULATED SALIVARY PH (paraffin) _____
STIMULATED SALIVARY FLOW _____

Axis B – Risk and Etiological factors and comorbid conditions

B1. Psycological 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
Several days
More than half the days
Nearly every day

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

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

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

B1.2 COPING

Consider how well the following statements describe your behaviors and actions

1. I look for creative ways to alter difficult situations
I tend to look for creative ways to deal with difficult situations.*

Does not describe me at all
Does not describe me
Neutral
Describes me
Describes me very well

2. Regardless of what happens to me, I believe I can control my reaction to it
Does not describe me at all
Does not describe me
Neutral
Describes me
Describes me very well

3. I believe I can grow in positive ways by dealing with difficult situations
Does not describe me at all
Does not describe me
Neutral
Describes me
Describes me very well

4. I actively look for ways to replace the losses I have encounter in my life
*I actively look for ways to replace the losses that come my way.**
Does not describe me at all
Does not describe me
Neutral
Describes me
Describes me very well

B2. Concurrent sleep-related conditions assessment
Self Report

B2.1 SLEEP APNEA SCREENING

Please mark which of the following questions is answered **positively**

Do you snore loudly?
Do you often feel tired, fatigued or sleepy during daytime?
Has anyone observed you stop breathing or choking/gasping during sleep?
Do you have or are being treated for high blood pressure?
Body mass Index more than 35?
Age older than 50?
Neck size large (43 cm or larger for males; 41 cm or larger for females)?
Gender=male?

B2.2 INSOMNIA SCREENING

Indicate **which of the following statements** can be applied **to you**

I have difficulty falling asleep
Thoughts occupy my mind and keep me from sleeping
I foresee a problem with sleep several times a week
Once I wake up, I'm never able to go back to sleep
I worry about things and have trouble relaxing
I wake up in the morning earlier than I would like
I lie awake for half an hour or more before falling I fall asleep

B2.3 PERIODIC LIMB MOVEMENT DISORDER and RESTLESS LEG SYNDROME SCREENING

Indicate which of the following statements can be applied to you

Other than when exercising, I still experience muscle tension in my legs
I have noticed (or other have commented) that parts of my body jerk during sleep
I have been told that I kick at night
When trying to go sleep, I experience an aching or crawling sensation in my legs
I experience leg pain and cramps at night
Sometimes I can't keep my legs still at night. I just have to move them to feel comfortable
Even though I slept during the night, I feel sleepy during the day

B2.4 ORAL BEHAVIOR- SLEEP POSITION

How often do you sleep in a position that puts pressure on the **jaw, 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

B3. Concurrent non-sleep conditions assessment
Self Report

B3.1 ORAL BEHAVIOR - ACTIVITIES DURING WAKING HOURS
How often do you do each of the following activities based on the last month?

Q7. Hold or jat 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 a 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
Never

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 the average time/day of smartphone use

B3.3 OROFACIAL MOTOR DISORDERS
Have you been diagnosed with or do you suffer from possible signs of one of the following conditions?
Orofacial Dyskinesia
Oromandibular Dystonia
Parkinson's Disease
Huntington's Disease
Tourette's Syndrome
Hemifacial Spasms
Tardive Dyskinesia

B3.4 GASTROESOPHAGEAL REFLUX DISEASE SCREENING
How many times per week do each of the following symptoms occur?

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

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

C. Pain in the middle or upper stomach area
0 days
1 day
2-3 days
4-7 days

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

E. Trouble getting a good night's sleep because of heartburn or regurgitation
0 Days
1 Day
2-3 Days
4-7 Days

F. Need for over-the-counter medicine for heartburn or regurgitation
0 Days
1 Day
2-3 Days
4-7 Days

B3.5 AUTOIMMUNE OR CONNECTIVE TISSUE DISORDERS SCREENING
Have you been diagnosed with one of the following conditions?
Rheumatoid arthritis
Rheumatoid Arthritis
Lupus
Other systemic rheumatic diseases, including fibromyalgia
Other systemic conditions, including systemic sclerosis, rheumatic polymyalgia, mixed connective Disease

B3.6 ATTENTION DEFICIT HYPERACTIVITY DISORDER
Have you been diagnosed with Attention Deficit Hyperactivity Disorder?
No
Yes

B4. Prescribed medications and use of substances assessment 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 medicines?**

Antidepressants (e.g., Selective serotonin-reuptake inhibitors)
Benzodiazepines
Neuroleptics, Antipsychotics, Antiemetics (Dopamine antagonists)
ADHD medication
Anti-allergic medication
Medical marijuana CBD
Medical marijuana TSH
Opioids
Others

If yes, please list all the medications and dosage_____

B4.3 TOBACCO

Do you smoke or use any tobacco products?

No
Yes
Quit

If yes, how many cigarettes/day do you smoke?N°_____

B4.4 ALCOHOL

Do you ever drink alcoholic beverages (beer, wine, hard liquor)?

No
Yes
Quit

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

B4.5 SOFT DRINK

Do you regularly drink sparkling **drinks? (e.g., Cola – RedBull – Sprite – Fanta)?**

No
Yes
Quit

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

B4.6 JUICES AND FRUITS

Do you regularly drink juices or citric fruits (e.g., lemon, orange, grapefruit)?

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. Additional factors assessment

B5.1 FAMILY BRUXISM SCREENING

Do you know of anyone in your family (for example, father, mother, children) who has had any history of bruxism occurrence?

No
Yes Father/Mother/Son/Daughter/Grandfather/Grandmother
Don't know

B5.2 FAMILY TOOTH **WEAR SCREENING**

Do you know of anyone in your family (for example, father, mother, children) who has tooth wear?

No
Yes Father/Mother/Son/Daughter/Grandfather/Grandmother
Don't know

B5.3 FAMILY OSA SCREENING

Do you know anyone in your family (for example, father, mother, children) who has sleep apnea?

No
Yes Father/Mother/Son/Daughter/Grandfather/Grandmother
Don't know

B5.4 FAMILY OROFACIAL PAIN SCREENING

Do you know of anyone in your family (for example, father, mother, children) who has nondental facial pain?

No
Yes Father/Mother/Son/Daughter/Grandfather/Grandmother
Don't know

B5.5 FAMILIAR GERD SCREENING

Do you know of anyone in your family (for example, father, mother, children) who has gastroaesophageal reflux disease?

No
Yes Father/Mother/Son/Daughter/Grandfather/Grandmother
Don't know