BACK TRANSLATION 1

Standardised Tool for the Assessment of Bruxism

STAB

Complete Instrument

English Version

April 2023

Index

Standardised Tool for the Assessment of Bruxism

(STAB)

Demographic Questionnaire

Sex
Male
Female
Non Declared/Other

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

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

Which ethnic group do you belong to? Mark all the necessary options.
Asian
African-American
Caucasian
Other (Specify)

What is the highest degree or level of education you have achieved?
Compulsory schooling (<16 years)
Secondary schools (e.g., high schools) up to 18 years
University, without obtaining the degree
University Graduate
Post-graduate level

Axis A – Assessment of the state 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 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
During the last month, how many times do you grind your teeth during the light hours?

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 HISTORY OF AWAKE TEETH GRINDING QUESTION
Did you use to grind your teeth during light hours in past?

No
Yes
Don't know

A2.2 AWAKE TEETH CLENCHING QUESTION
During the last month, how many times do you clench your teeth during the light hours?

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 HISTORY OF AWAKE TEETH CLENCHING QUESTION
Did you use to clench your teeth during light hours in past?

No
Yes
Don’t know

A2.3 AWAKE TEETH CONTACT QUESTION
How often do you press, touch, or hold your teeth together other moments than while eating (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 HISTORY OF AWAKE TEETH CONTACT QUESTION
Did you use to press, touch, or hold your teeth together other moments than while eating (contact between upper and lower teeth) in the past?

No
Yes
Don’t know

A2.4 AWAKE MANDIBLE BRACING QUESTION
During the last month, how often do you tighten muscles without touching your 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

A2.4.1 HISTORY OF AWAKE MANDIBLE BRACING QUESTION
Did you use to tighten muscles without touching teeth in the past?
No
Yes

Don’t know

A3. Chief's complaints of the patients

TEMPOROMANDIBULAR JOINT DISORDERS (TMD)

A3.1 PAIN IN TMD
In the last 30 days, how long did any pain last in the jaw or in the temple, on both side?

No pain
Pain comes and goes
Pain is always present

A3.2 PAIN OR STIFFNESS ON AWAKENING
In the last 30 days, do you feel any pain or stiffness in the jaw on awakening?
No
Yes

A3.3 CLOSED LOCK
In the last 30 days, have you had your jaw locked, even just for a moment, so you could not open at all the mouth?

No
Yes

A3.4 PAIN’S CHANGES DURING ACTIVITIES
In the last 30 days, did any of these activities produce a change in pain (get better or worse) in the jaw or in the temple?

Chewing hard or tough food
Opening your mouth or moving your jaw forward or to the side
Jawhabits (e.g.,holding teeth together, clenching, grinding, chewing gum)
Other jaw activities such as talking, kissing, or yawning

A3.5 NOISES IN JAW JOINT
In the last 30 days, did you heard any noises coming from the jaw’s joint while you are moving the mandible?

No
Yes

A3.6 MUSCLE PAIN DURING AWAKETIME
In the last 30 days, did you feel pain in jaw muscles in any of these moments of the day?

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

A3.6.1 MUSCLE TIREDNESS OR FATIGUE DURING AWAKETIME
In the last 30 days, did you have jaw muscle stiffness or sensation or tiredness or fatigue 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

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

Tiredness, soreness or tightness in the jaw
Feeling that your teeth are clenched or your mouth is sore
Pain in the temples
Feeling of tension in the jaw joint upon awakening and feeling that you have to move the jaw to relax it
Difficulty in opening your mouth upon waking
Hearing or feeling a click in the jaw joint upon awakening that goes away afterward

HEADACHE

A3.8 Headache
In the last 30 days, have you had headaches involving the temple area as well?
No
Yes
If Yes - how many days?

TOOTH WEAR

A3.9 TOOTH WEAR
Have you ever experienced any of the following symptoms due to tooth wear?

Sensitivity and/or pain: yes/no
Functional problems (difficulty chewing and eating): yes/no
Cosmetic deterioration (impaired smile aesthetics): yes/no
Damage to dental hard tissue and restorations: yes/no
Impaired phonetics: yes/no

TINNITUS

A3.10 Tinnitus
Do you hear 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
Have you ever had loss of saliva at night?

I've never had any drooling at night
My pillow sometimes gets wet during the night
My pillow gets wet regularly during the night
My pillow always gets wet during the night
My pillow and other sheets get wet every night

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

A4. Joints and Muscles

A4.1 TMD DIAGNOSES
Mark the presence of the following diagnoses

A4.1.1. PAIN DISORDERS*
* Please answer this section only if the questions in section A3.3 (TMD Pain Screener) have been answered positively by the patient
Myalgia
Widespread myofascial pain
Radiating myofascial pain
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 dislocation with reduction
Disc dislocation with intermittent locking
Disc displacement without reduction with limited opening
Disk dislocation without reduction without limited opening
Degenerative joint diseases
Subluxation

A4.1.3. LEFT TMJ DISORDER *
* Please specify whether the diagnosis is based on clinical or radiological evaluation

Disc dislocation with reduction
Disc dislocation with intermittent locking
Disc displacement without reduction with limited opening
Disk dislocation without reduction without limited opening
Degenerative joint diseases
Subluxation

A4.2 MASSETER HYPERTROPHIA
Highlight the presence of masseter muscle hypertrophia:
Left
Right

A5. Intraoral and Extraoral Tissues

A5.1 SOFT AND BONE TISSUE

Mark the presence of any of the following signs:

Linea alba Left Right

Lip Impression Superior Inferior

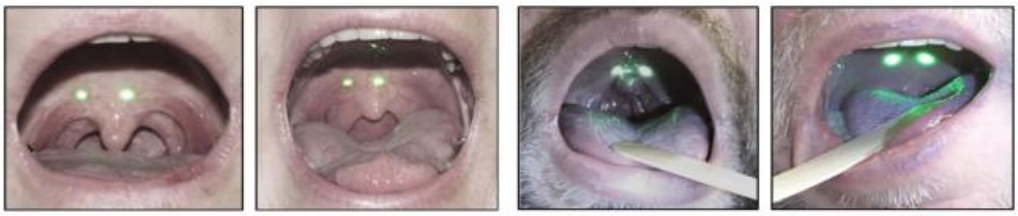
Dentellatura sulla mucosa labiale (penso intendesse sulla lingua) Tongue impression Left Front Right

Tongue Ulceration* Left Front Right

Alveolar bone exostosis Mandibole (buccal/Lingual) Maxilla (buccal/lingual/Mid-palatal)

* If positive for firm, indurated, rolled borders – red flag for further urgent investigation

A5.2 MODIFIED FRIEDMAN TONGUE POSITION



Category I:
No phonation/ tongue depressor – uvula and palatal arch visible
Senza fonazione/ depressore della lingua
Ugola e arco palatale visibile

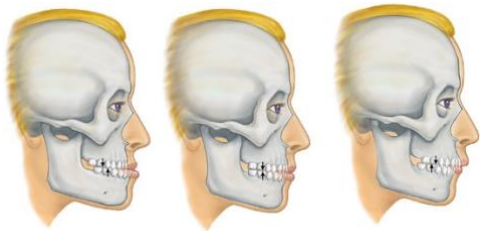
Category II:
With phonation – uvula and palatal arch visible
Con fonazione
Ugola e arco palatale visibile

Category III:
With tongue depressor – uvula and palatal arch visible
Con depressore della lingua
Ugola e arco palatale visibile

Category IV:
With phonation/ tongue depressor – uvula and palatal arch not visible
Con fonazione e depressore della lingua
Ugola e arco palatale non visibile

A5.3 SKELETAL CLASS (Opzional)

Class 1
Class 2
Class 3



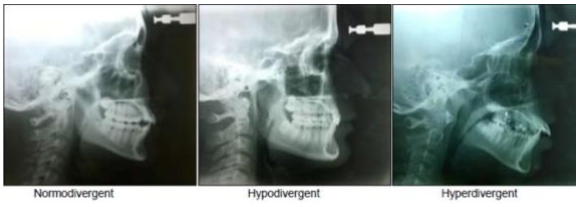
Skeletal Class III Facial Profile
III Classe scheletrica Profilo facciale

Skeletal Class I Facial Profile
I Classe scheletrica Profilo facciale

Skeletal Class II Facial Profile
II Classe scheletrica Profilo facciale

A5.4 SKELETAL PROFILE (Optional)

Normodivergent Profile (Midlium Gonial Angle)
Hypodivergent Profile (Low Gonial Angle)
Hyperdivergent Profile (High Gonial Angle)



Normodivergent Hypodivergent Hyperdivergent

A6. Teeth and Restorations

A6.1 TOOTH WEAR EVALUATION – 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 *

* During quantification, if grade ≥ 2 is found, qualification is required.

Clinical signs indicating the influence of mechanical factors:

Brilliant, flat and shiny facets
Enamel and dentin wear at the same degree
Wear on the occlusal surfaces with characteristics corresponding to the opposing teeth
Fractures of Cusp or restorations
Impression on the cheeks, tongue and/or lips
Non-Carious Cervical Lesions (NCLC) located in the cervical areas of the teeth
Buccal Non-Carious Lesions (NCLC), wider than deep
Compromised Cervical areas of the premolars and canines
Cracks line 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 Sensibility						
annoyance / pain on biting						
Fractured teeth						

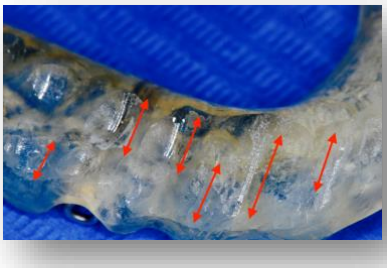
A6.3 RESTORATIONS

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

	Sextan 1	Sextan 2	Sextan 3	Sextan 4	Sextan 5	Sextan 6
Broken/lost fillings						
Damaged restorations						
Fractured weneers						
Mobile implant						
Fractured implant						
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., streaks) Left Front Right
Prevalence of clenching signs (e.g. dots similar to circles) Left Front Right
Combination of grinding and clenching marks Left Front Right
Fractures o perforations Left Front Right

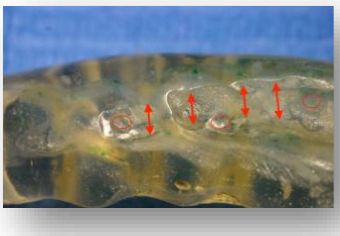


Example of grinding marks

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) – Strumental Assesment

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 to sleep bruxism _____
Number of arousal not related to sleep bruxism _____
Bruxism time index (if available) _____
Bruxism Work Index (if available) _____

A7.3 OTHER METHODS (Optional)

Smartphone application score for grinding noises

A7.4 APPLIANCE WITH SENSORS (Optional)

Number of pressure events on the bite

A8. Awake Bruxism

A8.1 ECOLOGICAL MOMENTARY ASSESSMENT – One week report

CONDITION	Week 1 (in %)	Other weeks (in %)
relaxed Jaw muscles (and teeth not touching)		
Jaw bracing (no contact between teeth)		
Contact between teeth (light contact in fixed position)		
Dental clenching (strong contact in fixed position)		
Dental grinding		

A8.2 WAKE-TIME ELECTROMYOGRAPHY

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)

SALIVA PH AT REST _____
SALIVAR FLOW AT REST _____
STIMULATED SALIVARY PH (paraffin) _____
STIMULATED SALIVARY FLOW _____

Axis B – Risk and Etiological Factors and Comorbidities

B1. Psycological Evaluation – Self Report

B1.1 ANXIETY AND DEPRESSION SCREENING

In the past two weeks, how many times have you been bothered by the following problems?

1. Feeling nervous, anxious or on edge.
Never
Some days
More than half the days
Nearly every day

2. Not being able to stop or control worrying
Never
Some days
More than half the days
Nearly every day

3. Little interest or pleasure in doing things
Never
Some days
More than half the days
Nearly every day

4. Feeling down, depressed, or hopeless
Never
Some days
More than half the days
Nearly every day

B1.2 ADAPTABILITY

Take into consideration how accurately the following statements describe your attitudes and actions

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

It doesn't describe me at all
It doesn't describe me
Neutral
It describes me
It describes me very well

2. No matter what happens to me, I believe I can control my reaction
*No matter what happens to me, I am confident that I can control my reaction**
It doesn't describe me at all
It doesn't describe me
Neutral
It describes me
It describes me very well

3. I believe I can grow in a positive way by dealing with difficult situations
*I think I can learn positive things when faced with difficult situations.**
It doesn't describe me at all
It doesn't describe me
Neutral
It describes me
It describes me very well

4. I actively look for ways to replace the losses I have suffered in my life
*I actively look for ways to replace the losses that come my way.**
It doesn't describe me at all
It doesn't describe me
Neutral
It describes me
It describes me perfectly

* https://www.frontiersin.org/articles/10.3389/fpsyg.2021.641213/full

B2. Concurrent Sleep-related Conditions Evaluation – Self Report

B2.1 SLEEP APNEA SCREENING
Please mark which of the following questions you would answer positively
Do you snore loudly?
Do you often feel tired, fatigued or sleepy during the day?
Has anyone seen you stop breathing or choking/gasping during sleep?
Do you have or are you being treated for high blood pressure?
Do you have a body mass index greater than 35?
Are you over the age of 50?
Does it have a large neck? (43 cm or greater for men; 41 cm or greater for women)?
Gender=Male?

B2.2 INSOMNIA SCREENING
Please mark which of the following statements apply 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 stay awake for half an hour or more before falling asleep

B2.3 PERIODIC MOVEMENT DISORDER AND RESTLESS LEG SYNDROME SCREENING. Please mark which of the following statements apply to you

Other than when I exercise, I still feel muscle tension in my legs.
I have noticed (or had been pointed out by others) that parts of my body jerk during sleep.
I had been told I kick at night.
When I try to fall asleep, I get a aching or tingling sensation to the legs.
At night I have pain and cramps in my legs.
Sometimes I can't keep my legs still at night. I have to move them to feel more comfortable.
Even though I slept through the night, I feel sleepy during the day

B2.4 ORAL BEHAVIOR- POSITION DURING SLEEP
Based on the last month, how often do you sleep in a position that puts 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. Concurrent non-Sleep-related Conditions Evaluation – Self Report

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

Q7. Hold or jut jaw forward or to the sid
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 the tongue firmly against the 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 your 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. Biting, chewing or playing 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. Keep the jaw in a rigid or tense position, such as to lock or protect it
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. Holding between teeth or biting objects such as hair, pipe, pencils, pens, fingers, nails, 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. Playing an instrument that involves the use of the 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, like a cup, to rest your chin on your 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. Chewing 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, selling, customer service)
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 the phone between your shoulders and head
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 daily average usage of your telephone

B3.3 OROFACIAL MOTOR DISORDERS
Have you been diagnosed with, or do you suffer from possible signs of any 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 a week do you experience each of the following symptoms?

A. Burning sensation behind the breastbone (heartburn)
0 days
1 day
2-3 days
4-7 days

B. Stomach contents back up into 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 sleep due to heartburn or regurgitation
0 days
1 day
2-3 days
4-7 days

F. Need for over-the-counter medication 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 any of the following conditions?
Rheumatoid arthritis
Lupus
Other systemic rheumatic diseases, including fibromyalgia

Other systemic conditions, including multiple sclerosis, polymyalgia rheumatica, mixed connective diseases

B3.6 ATTENTION DEFICIT HYPERACTIVITY DISORDER

Have you been diagnosed with attention deficit hyperactivity disorder?

No

Yes

B4. Drug history and use of Sostance Assessment – Self Report

B4.1 DRUGS

Signs if you use recreational or street drugs

If yes, please mark which drug you used _____

B4.2 MEDICATIONS

Are you currently taking any of the following medicines?

Antidepressants (e.g., selective serotonin reuptake inhibitors)
Benzodiazepines
Neuroleptics, Antipsychotics, Antiemetics (dopamine antagonists)
ADHD medications
Antiallergic drugs
CBD medical marijuana
Medical marijuana TSH
Opioids
Others
If yes, please indicate all drugs and their dosages
_____

B4.3 TOBACCO

Do you smoke or use any tobacco products?

No
Yes
I quit
If yes, how many cigarettes do you smoke per day? N°_____

B4.4 ALCOHOL

Do you drink alcoholic beverages? (beer, wine, spirits)?

No
Yes
I quit
If yes, what is your approximate use of these alcoholic beverages (glasses per day)?_____

B4.5 SOFT DRINK

Do you regularly drink carbonated drinks? (e.g., Cola – Red Bull – Sprite – Fanta)?

No
Yes
I quit
If yes, what is your approximate use of these soft drink (glasses per day)?_____

B4.6 JUICES AND FRUITS

Do you regularly drink juice or eat fruit containing citric acid (e.g., lemon, orange, grapefruit, grape juice)?

No
Yes
I quit
If yes, what is your approximate use of these drink (glasses per day)? _____

B4.7 CAFFEINATE
Do you regularly drink coffee, tea, or other caffeinated beverages?
No
Yes
I quit
If yes, what is your approximate use of these drink (cup per day)?? _____

B5. Secondary factors Assessment

B5.1 FAMILY BRUXISM SCREENING

Do you know of anyone in your family (eg father, mother, children) who has had a history of bruxism?

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

B5.2 FAMILY DENTAL WEAR SCREENING

Do you know anyone in your family (e.g. father, mother, children) who suffers from 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 (e.g. father, mother, children) who suffers from sleep apnea?

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

B5.4 FAMILY OROFACIAL PAIN SCREENING

Do you know anyone in your family (e.g. father, mother, children) who suffers from non-dental facial pain?

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

B5.5 FAMILY SCREENING FOR GATROESOPHAGEAL REFLUX DISEASE

Do you know anyone in your family (e.g. father, mother, children) with gastroesophageal reflux disease?

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