

**SURVEY FOR RHEUMATOLOGISTS EXPERT IN ULTRASOUND (US) GUIDED
ARTHROCENTESIS (UGAC) AND INTRAARTICULAR INJECTIONS*
ON BEHALF OF THE EULAR MUSCULOSKELETAL ULTRASOUND GROUP**

*For the purpose of this survey, the procedures: ultrasound-guided arthrocentesis and intraarticular injection will be collectively referred to as ultrasound guided arthrocentesis (UGAC).

Name:

Country:

Specialty:

Q1. How many rheumatologists are there in your country (number)?

Q2. How many rheumatologists routinely perform joint injection in your country?
 1-10% 10-50% 50-80% > 80%

Q3. In what setting do you perform your joint injections? (you may tick more than 1 box)
 Inpatient department Outpatient clinic
 Operating room Private Practice

Q4. Do you perform musculoskeletal ultrasound examinations? Yes No

Q5. Do you regularly perform UGAC? Yes No

Q6. How many UGACs have you performed? 1-50 50-300 300 <

Q7. What percentage of rheumatologists perform musculoskeletal ultrasound examinations routinely in your country?
 1-10% 10-50% 50-80% > 80%

Q8. What percentage of rheumatologists routinely performs UGAC in your country?
 1-10% 10-50% 50-80% > 80%

Q9. Who performs UGAC regularly in your country? (you may tick more than 1 box)
 Rheumatologist Radiologist
 Orthopedic/Trauma Surgeon Phys. Med. & Rehabilitation Spec.
 Sport Medicine Specialist Internal Medicine Specialist
 General Practitioner Emergency Medicine Specialist
 Qualified nurse practitioner Physiotherapist

Other (please specify)

Q10. Do you use ultrasound directly (examination during the procedure) or indirectly (prior to examination and/or marking of area of interest followed by arthrocentesis) in UGAC?
 Directly Indirectly Both

Q11. What percentage of your joint injections are performed following an ultrasound examination (indirect UGAC)?
 1-10% 10-50% 50-80% > 80%

Q12. What percentage of your joint injections are performed under ultrasound (direct UGAC)?
 1-10% 10-50% 50-80% > 80%

Q13. If US is used directly, who performs the ultrasound examination during the UGAC procedure?

Rheumatologist performing injection	<input type="checkbox"/>	Assisting rheumatologist	<input type="checkbox"/>
Radiologist	<input type="checkbox"/>	Sonographer	<input type="checkbox"/>
Radiology assistant	<input type="checkbox"/>	Nurse, nurse practitioner	<input type="checkbox"/>

Q14. If UGAC is used directly, please select items from the following list that are commonly used in the procedure? (you may tick more than 1 box)

Antiseptic	<input type="checkbox"/>	Sterile mask	<input type="checkbox"/>	Scrub cap	<input type="checkbox"/>
Sterile gloves	<input type="checkbox"/>	Scrub gown	<input type="checkbox"/>	Safety glasses	<input type="checkbox"/>
Scrub apron	<input type="checkbox"/>	Sterile sponge	<input type="checkbox"/>	Sterile drape	<input type="checkbox"/>
Sterile US gel	<input type="checkbox"/>	Sterile condoms	<input type="checkbox"/>	Sterile cover for US	<input type="checkbox"/>

Q15. How do you disinfect/sterilize/isolate the transducer?

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Q16. What type of transducer do you use for UGAC?

Linear transducer	<input type="checkbox"/>	Curved transducer	<input type="checkbox"/>	Both	<input type="checkbox"/>
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Q17. What joints/region are commonly selected for UGAC? (including related bursae, tendon sheaths) (you may tick more than 1 box)

Knee	<input type="checkbox"/>	Elbow	<input type="checkbox"/>	Shoulder	<input type="checkbox"/>	Hip	<input type="checkbox"/>
Wrist	<input type="checkbox"/>	Ankle	<input type="checkbox"/>	Hand joints	<input type="checkbox"/>	Foot joints	<input type="checkbox"/>
Sacroiliac joint	<input type="checkbox"/>	TMJ	<input type="checkbox"/>	Facet joint	<input type="checkbox"/>		

Other (please specify)

Q18. Do you perform ultrasound-guided injection for soft-tissue lesions? (you may tick more than 1 box)

Nerve blocks	<input type="checkbox"/>	Enthesis infiltration	<input type="checkbox"/>	Barbotage	<input type="checkbox"/>
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Other (please specify).....

Q19. Could you please briefly describe the procedure of UGAC as performed by you?

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Q20. What is the most commonly injected intrarticular compound during joint injection? (you may tick more than 1 box)

Corticosteroid	<input type="checkbox"/>	Hyaluronan	<input type="checkbox"/>
Anesthetic (e.g. lidocaine)	<input type="checkbox"/>	NSAID	<input type="checkbox"/>
Saline (irrigation)	<input type="checkbox"/>	Osmic acid	<input type="checkbox"/>
Radionuclide	<input type="checkbox"/>		

Other (please specify).....

Q21. In your practice, is septic complication more common with UGAC as compared to blind arthrocentesis? (please comment if necessary)

Yes	<input type="checkbox"/>	No	<input type="checkbox"/>
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Comment

Q22. What other imaging-guided joint injections are performed regularly?

(you may tick more than 1 box)

MRI-guided Fluoroscopy-guided CT-guided

Q23. Have you received training in UGAC?

Yes No

Q24. If you answered yes to Q23. please select the type of training you received?

(you may tick more than 1 box)

Courses Self-taught Informal training from rheumatologist

Training from other specialists (please specify)

Other (please specify)

Q25. What percentage of rheumatologists in your country receive formal training in UGAC?

1-10% 10-50% 50-80% > 80%

Q26. How have rheumatologists been trained in UGAC in your country?

(you may tick more than 1 box)

Courses Self-taught Informal training from rheumatologist

Training from other specialists (please specify)

Other (please specify)

Q27. Is UGAC included in the rheumatology training curriculum?

No Optional Obligatory

Q27.1. If you answered yes to Q27. is competency assessed?

Yes No

Q27.2 If you answered yes to Q27.1., what requirements are necessary for competency? (you may tick more than 1 box)

Attending courses Theoretical exam Practical exam

A number of procedures performed How many procedures (number)?.....

A training period How long (months)?.....

Other (please specify)

Q28. Are there structured training programmes in UGAC for rheumatologists in your country (independent of speciality training)?

Yes No

Q28.1. If you answered yes to Q28. who provides training in UGAC for rheumatologists? (you may tick more than 1 box)

Rheumatology Society Orthopedic Surgery Society
Radiology Society Sport Medicine Society Other

(please specify).....

Q29. Do rheumatologists get reimbursement for UGAC?

No Yes, in private practice Yes, in publicly-funded health care practice

Thank you for your help!

Please, return this questionnaire to: Peter Mandl, MD, PhD or Peter Balint, MD, PhD preferably by e-mail: mandlpeter@yahoo.com or pvbalint@gmail.com

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