A survey on orthopedists opinion for an arthroscopic treatment of meniscus injuries

A. Physician’s level of education and experience

a. How many knee arthroscopies did you participate as an assistant during your residency / specialization?
   □ 0 □ 1-10 □ 10-30 □ > 30

b. How many knee arthroscopies do you perform yourself per year?
   □ 0-10 □ 10-30 □ 30 – 50 □ 50-100 □ 100-200 □ 200-500 □ >500

c. How many knee arthroscopies did you perform yourself during career?
   □ 0-10 □ 10-30 □ 30 – 100 □ 100-500 □ 500-1000 □ 1000-2000 □ >2000

d. Arthroscopy of which joints you are currently performing?
   □ shoulder □ elbow □ wrist □ spine □ hip □ knee □ ankle

B. Anesthesia for surgery

a. What type of anesthesia do you usually administer to the patient to perform knee arthroscopy?
   □ general anesthesia
   □ regional anesthesia (spinal and/or epidural)
   □ combination of general and regional

C. Postoperative treatment

a. Do you always apply an orthosis to the patient?
   □ yes □ no
   If yes, please specify the type or brand…………………………………………………………………

b. Do you use a knee drain?
   □ yes □ no □ sometimes

c. Do you use knee medications immediately after arthroscopy?
   □ yes □ no
   If yes, please specify…………………………………………………………………………………. 
D. Hospital stay

a. How long does your patient usually spend in the hospital after non-reconstructive arthroscopy?
   - hours
   - 1 day
   - 2 days
   - 3 days
   - 4 or more days

b. How long does your patient usually spend in the hospital after reconstructive arthroscopy?
   - hours
   - 1 day
   - 2 days
   - 3 days
   - 4 or more days

c. What type of anti-thrombotic prophylaxis is the patient administered?
   - aspirin
   - heparin
   - low molecular weight heparin
   - other (please specify) ……………………………
   - none

E. Post-surgical rehabilitation

a. Do you recommend your patients rehabilitation (excluding physical therapy) after knee arthroscopy?
   - never
   - rarely
   - sometimes
   - most of the times
   - always
   - depends on the procedure

b. How often your patients do not follow the rehabilitation recommendations?
   - never
   - rarely
   - sometimes
   - most of the times
   - always

c. Do you talk to the patient about the need for postoperative rehabilitation?
   - never
   - rarely
   - sometimes
   - most of the times
   - always

d. When does the rehabilitation phase for your patient officially begin?
   - day of surgery
   - day after surgery
   - 2 days after surgery
   - 3d-1 week after surgery
   - after the first week
   - after the first 2 weeks

e. Do all your patients follow standardized rehabilitation guidelines after knee arthroscopy?
   - yes
   - no

f. Do you apply different rehabilitation protocols depending on the procedures performed?
   - yes
   - no
g. Do you recommend the patient after knee arthroscopy rehabilitation with a physiotherapist?  
☐ yes ☐ no, I set the rehabilitation program myself

h. Do you apply cryotherapy to the operated joint?  
☐ yes ☐ no

i. Do you recommend physical therapy after knee arthroscopy?  
☐ yes ☐ no
If yes, please specify:
☐ laser
☐ magnetotherapy
☐ ultrasounds
☐ Solux lamps
☐ ionophoresis
☐ galvanization
☐ diadynamics
☐ TENS
☐ other (specify)……………………………

j. Return to sport

➢ Who is involved in decision?  
☐ surgeon ☐ physical therapist ☐ surgeon and physical therapist ☐ patient

➢ What criteria do you take into account when deciding on the patient's ability to return to sport? (you can select several)
☐ time since treatment ☐ no discomfort ☐ functional state
☐ correct image in examination

k. Do you apply any objective physical test or other method in order to assess whether the patient is ready to return to sports?  
☐ yes ☐ no
If yes, please specify:
☐ testing muscle strength and endurance on a dynamometer
☐ functional tests
☐ subjective surveys assessing the patient's function
☐ other (specify)………………………………………………………………….
F. **Arthroscopic procedures**

a. **What kind of arthroscopic procedures do you perform on knee?**
   - [ ] diagnostic arthroscopy
   - [ ] synovial folds removal
   - [ ] meniscus removal
   - [ ] meniscus sewing all inside
   - [ ] meniscus sewing inside-out/outside-in
   - [ ] meniscus transplant
   - [ ] ramp lesion repair
   - [ ] microfractures
   - [ ] cartilage reconstruction
   - [ ] ACL reconstruction
   - [ ] PCL reconstruction
   - [ ] simultaneous multi-lattice reconstruction
   - [ ] pediatric multi-ligament reconstruction (physeal-sparing)
   - [ ] other (specify)…………………………………

b. **What kind of arthroscopic procedures do you perform most frequently on knee?**
   - [ ] diagnostic arthroscopy
   - [ ] synovial folds removal
   - [ ] meniscus removal
   - [ ] meniscus sewing all inside
   - [ ] meniscus sewing inside-out/outside-in
   - [ ] meniscus transplant
   - [ ] ramp lesion repair
   - [ ] microfractures
   - [ ] cartilage reconstruction
   - [ ] ACL reconstruction
   - [ ] PCL reconstruction
   - [ ] simultaneous multi-lattice reconstruction
   - [ ] pediatric multi-ligament reconstruction (physeal-sparing)
   - [ ] other (specify)…………………………………

c. **What kind of meniscus repair methods do you use in your work?**
   - [ ] sewing all inside
   - [ ] sewing inside-out
   - [ ] sewing outside-in
   - [ ] scarification (pricking)
   - [ ] platelet rich plasma (PRP)
   - [ ] bone marrow cells
d. What diagnostic tests do you use when meniscus damage is suspected?
- ☐ none
- ☐ knee X-ray
- ☐ knee USG
- ☐ knee MR
- ☐ other (specify)...................

e. For how long after meniscus removal do you recommend using elbow crutches?
- ☐ 1-6 days
- ☐ 1 week
- ☐ 2 weeks
- ☐ 3 weeks
- ☐ 4 weeks
- ☐ 5 weeks
- ☐ 6 weeks
- ☐ 7 weeks
- ☐ 8 weeks
- ☐ I do not recommend using crutches
- ☐ other (specify)..................

f. For how long after meniscus repair do you recommend using orthosis?
- ☐ 1-6 days
- ☐ 1 week
- ☐ 2 weeks
- ☐ 3 weeks
- ☐ 4 weeks
- ☐ 5 weeks
- ☐ 6 weeks
- ☐ 7 weeks
- ☐ 8 weeks
- ☐ I do not recommend using orthosis
- ☐ other (specify)..................

g. How soon after meniscus sewing do you recommend a full range of knee motion??
- ☐ 1-6 days
- ☐ 1 week
- ☐ 2 weeks
- ☐ 3 weeks
- ☐ 4 weeks
- ☐ 5 weeks
- ☐ 6 weeks
- ☐ 7 weeks
- ☐ 8 weeks
- ☐ other (specify)............... 

h. What factors do you consider when deciding to remove or repair meniscus damage? (you can select several)
- ☐ patient’s age
- ☐ time since injury
- ☐ level of physical activity
- ☐ type of damage
- ☐ damage zone (red/red-white/white)
- ☐ damage representation in MR
- ☐ accompanying damage
- ☐ other (specify)............... 

i. Up to what patient’s age do you decide to repair meniscus?
- ☐ <20 y.o.
- ☐ <30 y.o.
- ☐ <40 y.o.
- ☐ <50 y.o.
- ☐ <60 y.o.
- ☐ <70 y.o.
- ☐ patient’s age does not matter

j. Whether the decision to repair / remove the meniscus depends on the practiced sport discipline?
- ☐ yes
- ☐ no
k. What is your preferred procedure in case of meniscus damage in an 18-year-old professional football player?
   ☐ removal of the damaged part of the meniscus
   ☐ repair of the damaged part of the meniscus

l. What is your preferred procedure in case of meniscus damage in a 30-year-old professional football player?
   ☐ removal of the damaged part of the meniscus
   ☐ repair of the damaged part of the meniscus