Indications for Lateral Extra-articular Procedures in the Anterior Cruciate Ligament–Reconstructed Knee: Part I of an International Consensus Statement

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Purpose: To define expert consensus on whether and how lateral extra-articular procedures (LEAPs) should accompany anterior cruciate ligament (ACL) reconstruction to optimize outcomes in ACL-deficient knees. **Methods:** Fifty-five knee surgeons from 17 countries on 5 continents completed a 3-round modified Delphi process. Twenty-one statements on patient selection for combined ACL reconstruction (ACLR) + LEAPs were graded on 5-point Likert scales; ≥75% "agree/strongly agree" signified consensus. Strength of recommendation was ranked, and statements failing the threshold were revised or discarded after discussion. **Results:** One statement achieved unanimous agreement (100%): it is strongly recommended to add a LEAP for active patients ≤25 years receiving hamstring-autograft ACLR to reduce graft failure. Strong consensus (≥90%) supported LEAPs in primary ACLR when grade 3 pivot shift (97.9%), knee hyperextension (97.9%), skeletally immature status (79.5%), revision ACLR (91.5%), return to pivoting sports (93.2%), active patients ≤25 years using nonhamstring grafts (90.7%), grade 3 Lachman test (90%), and when multiple relative risk factors coexist (statement 36, 97.1%). Consensus (75%-89.9%) favored LEAPs for chronic symptomatic ACL deficiency (86.1%), posterior tibial slope >12° (85.7%), and a history of contralateral ACL injury (88.9%). Eight statements did not reach consensus regarding small-diameter autografts, female athletes, imaging signs of anterolateral injury (e.g., Segond fracture, lateral femoral-notch sign), and concomitant meniscal procedures. One statement on LEAPs with primary ACL repair was withdrawn because the project focused on reconstruction. **Conclusions:** International experts strongly recommend adding a LEAP in young active patients undergoing hamstring-autograft ACLR and in cases of high-grade rotational or anterior laxity, knee hyperextension, revision surgery, or returning to pivoting sports. Unresolved issues include small graft size, female athletes, imaging findings of rotational instability, and concurrent meniscal procedures, highlighting priorities for future research. **Level of Evidence:** Level V, expert opinion.

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Received March 6, 2025; accepted June 13, 2025.

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0749-8063/25450/$36.00

https://doi.org/10.1016/j.arthro.2025.06.012

Lateral extra-articular procedures (LEAPs) have been used for decades to limit rotational instability in anterior cruciate ligament (ACL)–deficient knees.[1-4] Early interest led to the frequent use of stand-alone extra-articular tenodesis, but enthusiasm declined due to concerns that these procedures may overconstrain the lateral compartment and accelerate degenerative changes.[5-7] In the past decade, renewed attention has focused on the anterolateral structures of the knee in conjunction with anatomic ACL reconstruction, specifically the anterolateral ligament (ALL), leading to a proliferation of clinical studies suggesting that LEAPs may reduce graft failure rates, particularly in high-risk populations.[8-12] These findings have led some surgeons to routinely combine LEAPs with intra-articular ACL reconstructions (ACLRs), while others remain

cautious given the variability in surgical techniques, patient populations, and graft types used.[13]

Despite the emerging evidence, there is no universal consensus on the indications for performing LEAPs. The debate includes issues such as whether to add an ALL reconstruction (ALLR) or iliotibial band—based tenodesis, how to identify patients who would benefit most from anterolateral augmentation, and whether such procedures are truly necessary in every ACL revision scenario. These uncertainties highlight the importance of providing an updated framework for patient selection and operative decision-making.

Therefore, the aim of this project was to establish expert consensus on when and how LEAPs should be used to optimize clinical outcomes in ACL-deficient knees. Our hypothesis was that consensus would be reached on specific risk factors that are widely accepted to justify combined procedures, whereas other potential indications would remain controversial. In addition, we hypothesized that consensus would be achieved for most statements regarding surgical techniques and complications associated with combined ACL reconstruction and LEAPs.

Methods

Consensus Design

This consensus is divided into 2 parts to comprehensively address the use of LEAPs in ACL reconstruction. Part I focuses on establishing expert agreement on the indications for performing LEAPs, while Part II addresses surgical techniques, complications, and rehabilitation protocols.[14] A modified Delphi consensus process was conducted, a method commonly used in sports medicine and orthopaedic research that involves multiple rounds of anonymous surveys.[15-17] This LEAP consensus follows the anterolateral complex of the knee (ALC) consensus held in London in 2017 and published in 2019, which focused on the anatomy and biomechanical properties of the ALC.[17] A working group of 7 experts developed 36 statements, 21 on the indications and 15 on the techniques, and complications of LEAP in ACL reconstruction, based on the most up-to-date literature. The list of participants was established by the steering committee: Bertrand Sonnery-Cottet, Alan Getgood, Camilo Partezani Helito, and Volker Musahl. These authors contributed to the creation of consensus participants and recommended individuals to be involved in the process. Recent conference and publications from the Anterior Cruciate Ligament Study Group, the American Orthopaedic Society for Sports Medicine, the European Society of Sports Traumatology, the International Society of Arthroscopy, Knee Surgery and Orthopaedic Sports Medicine, and various international conferences were screened to identify invited speakers whose research focused on the anterior cruciate ligament, to ensure that opinion leaders in the field were invited. In addition, we sought to include surgeons from several countries to take account of different philosophies and viewpoints. Finally, a selection of 58 international experts in the management of ACL injuries from 17 different countries across 5 continents, over 50% of whom are members of the ACL Study Group, extended to other recognized experts in the field, including pediatric surgeons and rehabilitation specialists, participated in this consensus.

The expert panel initially included 57 voting members. Two online rounds were completed, followed by a final in-person round on November 8, 2024, and chaired by Adnan Saithna and moderated by Alan Getgood, Bertrand Sonnery-Cottet, Camilo Partezani Helito, and Volker Musahl. During the first and second rounds, participants were provided with brief notes for each proposed statement, including a summary of the relevant clinical outcomes and supporting literature. Panelists' responses were collected anonymously to ensure independent and unbiased input. In the third round, although participants were present and shared their views during live discussions, voting remained confidential: the voting process was online and anonymized so that neither the steering committee nor the participants could see individual votes or identify specific voter responses. Only aggregated percentages were visible to the group. After the survey was closed, access to unblinded individual responses was limited to the data manager. After each round, responses were compiled, analyzed, and shared with the panel. Participants were encouraged to review their feedback in light of the group's collective input, enabling adjustments and improvements to the statements. This iterative process of gathering and refining feedback continued until a strong consensus was achieved. After each round, responses were compiled, analyzed, and shared with the panel. Participants were encouraged to review their feedback in light of the group's collective input, enabling adjustments and improvements to the statements. This iterative process of gathering and refining feedback continued until a strong consensus was achieved.

Consensus Process

In the first round, the expert panel received a link to a survey (SurveyMonkey) via e-mail and was asked to evaluate the appropriateness of statements. A list of statements was developed based on a comprehensive review of the existing literature and categorized into 3 domains: indications, techniques, and complications. In each round, panelists independently rated the appropriateness of each statement using a 9-point Likert scale, where scores of 1 to 4 indicated "inappropriate," 5 indicated "uncertain," and 6 to 9 indicated

"appropriate." When a statement was rated as inappropriate or uncertain, panelists were invited to provide open-ended comments explaining what changes would be necessary for them to consider the statement appropriate. The statements' development was not based on a standardized process but was led by a subgroup of the Steering Committee. Nevertheless, participants were given the opportunity to suggest modifications to the statements during each round of the Delphi process, allowing for iterative refinement based on collective feedback. These qualitative responses were used to refine and clarify statements between rounds, in keeping with the iterative nature of the Delphi method. The panelists were encouraged to base their evaluations on a summary of evidence provided by the core group guiding the consensus process, without factoring in the cost of the procedure.

Statements were classified as follows:

- "Appropriate" if they achieved a median score of $\geq$7 without disagreement among the panelists
- "Inappropriate" if they received a median score of $\leq$3 without disagreement

Statements that did not meet these criteria were revised and rephrased based on the panel's comments, then subjected to revoting in subsequent rounds to refine and clarify their content (Table 1).

In the second round, the same process was performed. At this time, if there were no missing values, one of the scores could be excluded from the analysis of the degree of agreement according to the following rules:

- The minimum value is excluded if the median is strictly greater than 5.
- The maximum value is excluded if the median is less than or equal to 5.

After applying the rules outlined in Table 1, only statements that met the "strongly agree" mark were accepted as they were. Statements that did not meet these criteria were revised and rephrased based on the panel's comments. They were then subjected to revoting in subsequent rounds to refine and clarify their content.

Table 1. Round 1 and 2 Statement Scoring System

Proposal	Agreement Among Experts	Distribution of Scores	Median
Appropriate	Strong agreement	[7-9]	$\geq$7
	Relative agreement	[5-9]	$\geq$7
Inappropriate	Strong agreement	[1-3]	$\leq$3
	Relative agreement	[1-5]	$\leq$3.5
Uncertain	Undecided	[1-9]	[4-6.5]
	No consensus	Other situations	

Final Voting

Fifty-seven experts were invited to participate in the online rounds, and 55 voters were present in the third round, of whom 10 were online voters, resulting in an overall dropout rate of 3.5%. A 5-point Likert scale was used during an in-person meeting, with a direct vote facilitated by Adnan Saithna, Alan Getgood, Alessandro Carrozzo, Camilo Partezani Helito, and Thais Dutra Vieira. Respondents rated statements as follows: strongly disagree, disagree, undecided, agree, and strongly agree.

Responses were analyzed with stricter cutoff criteria: items were only considered to have reached consensus if more than 75% of respondents agreed (either "agree" or "strongly agree"). Agreement among $\geq$75% of the participants has previously been noted to be the most frequently specified determination of a consensus for Delphi studies.[18]

Consensus was defined based on the combined percentage of respondents selecting "strongly agree" or "agree." The levels of consensus were categorized as follows: unanimous consensus (100%), strong consensus (90%-99.9%), consensus (75%-89.9%), and no consensus (<75%). Each statement was assigned a strength of recommendation: "Strongly recommended," "Recommended," "Should be considered," and "Could be considered." If a statement did not receive sufficient support with the proposed wording, the wording was adjusted, and voting was repeated at a lower level of recommendation until consensus was reached or it was determined that no feasible wording could achieve agreement.

Results

Among the statements evaluating indications for combining LEAPs with ACL reconstruction, 12 reached consensus, 8 did not, and 1 statement, focused on LEAPs in primary ACL repair, was excluded after discussion because the objective was to achieve consensus specifically on ACL reconstruction. All statements and their corresponding levels of agreement are summarized in Table 2.

Distribution of agreement for the 20 statements is displayed in Figure 1.

The panel reached a unanimous consensus that LEAP should be strongly recommended in young, active patients ($\leq$25 years) undergoing ACLR with hamstring autograft.

Adding a LEAP to ACLR was strongly recommended for patients with grade 3 pivot shift, knee hyperextension, and in skeletally immature adolescent patients, conditions associated with high rotational instability. The combined procedures were recommended in the

Table 2. All the Statements Related to Surgical Techniques and Complications for Combined Procedures Along With Their Corresponding Levels of Agreement: Unanimous Consensus (100%), Strong Consensus (90%-99.9%), Consensus (75%-89.9%), and No Consensus (<75%)

Statement Number	Statement Text	Consensus Level	Recommendation Strength
1	In active patients aged ≤25 years, adding a LEAP to ACL reconstruction using hamstring autograft is strongly recommended to reduce graft failure rate.	Unanimous Consensus	Strongly Recommended
2	In patients with grade 3 pivot shift, adding a LEAP to ACL reconstruction is strongly recommended.	Strong Consensus	Strongly Recommended
3	In patients undergoing ACLR revision, adding a LEAP to ACL reconstruction is recommended.	Strong Consensus	Recommended
4	If the diameter of the hamstring ACL autograft is small (<8 mm), adding a LEAP to ACL reconstruction should be considered.	No Consensus	Should Be Considered
5	In patients with knee hyperextension, adding a LEAP to ACL reconstruction is strongly recommended.	Strong Consensus	Strongly Recommended
6	In patients with Segond fracture, adding a LEAP to ACL reconstruction should be considered.	No Consensus	Should Be Considered
7	In active patients aged ≤25 years, adding a LEAP to ACL reconstruction using graft options other than hamstrings should be considered to reduce the graft failure rate.	Strong Consensus	Should Be Considered
8	In patients with grade 2 pivot shift, adding a LEAP to ACL reconstruction should be considered.	No Consensus	Should Be Considered
9	In athletes returning to pivoting sports, adding a LEAP to ACL reconstruction should be considered.	Strong Consensus	Should Be Considered
10	In patients with chronic symptomatic ACL deficiency, adding a LEAP to ACL reconstruction is recommended.	Consensus	Recommended
11	In patients with a deep lateral femoral notch sign, adding a LEAP to ACL reconstruction should be considered.	No Consensus	Should Be Considered
12	In the setting of concomitant medial meniscal repair, adding a LEAP to ACL reconstruction should be considered.	No Consensus	Should Be Considered
13	To restore knee stability, in patients with concomitant medial meniscectomy, adding a LEAP to ACL reconstruction should be considered.	No Consensus	Should Be Considered
14	When ACL repair is performed, adding a LEAP is strongly recommended. (Removed)	Removed	Strongly Recommended
15	In patients with anterolateral complex injuries diagnosed via magnetic resonance imaging or ultrasound, adding a LEAP should be considered.	No Consensus	Should Be Considered
16	In patients with a posterior tibial slope greater than 12°, adding a LEAP to primary ACL reconstruction should be considered.	Consensus	Should Be Considered
17	In patients with a previous contralateral ACL injury, adding a LEAP to primary ACL reconstruction should be considered.	Consensus	Should Be Considered
18	Adding a LEAP to primary ACL reconstruction in female athletes should be considered.	No Consensus	Should Be Considered
19	In skeletally immature adolescent patients, adding a LEAP to primary ACL reconstruction is strongly recommended.	Consensus	Strongly Recommended
20	In patients with an ACL injury and grade 3 Lachman, adding a LEAP to ACL reconstruction should be considered.	Strong Consensus	Should Be Considered
36	There are a number of relative indications that, when considered together, may reach a threshold at which LEAP is recommended in addition to ACL reconstruction.	Strong Consensus	May Be Considered

ACL, anterior cruciate ligament; ACLR, anteriotr cruciate ligament reconstruction; LEAP, lateral extra-articular procedure; OA, osteoarthritis.

context of revision ACLR and chronic symptomatic ACL deficiency and should be considered for active patients ≤25 years using nonhamstring grafts, in patients with a posterior tibial slope >12°, in those with a history of contralateral ACL rerupture, and those with a grade 3 Lachman test. Finally, the addition of a LEAP to ACLR may be considered when relative risk factors are present in combination and may collectively support the indication for LEAP, even if no single factor is determinative.

Conversely, 8 statements did not reach consensus, including graft diameter <8 mm, imaging-based findings (e.g., Segond fracture, deep femoral notch sign, ALC injury on magnetic resonance imaging/ultrasound), concomitant meniscal procedures, and in female athletes.

Discussion

The most important finding of this consensus is that there was considerable consensus on the indications of combining ACLR and LEAPs in several categories of patients, despite the diversity of surgical backgrounds and international representation from 5 continents. One statement achieved unanimous (100%) agreement, 6 statements reached strong consensus (90%-99.9% agreement), and 4 reached consensus (75%-

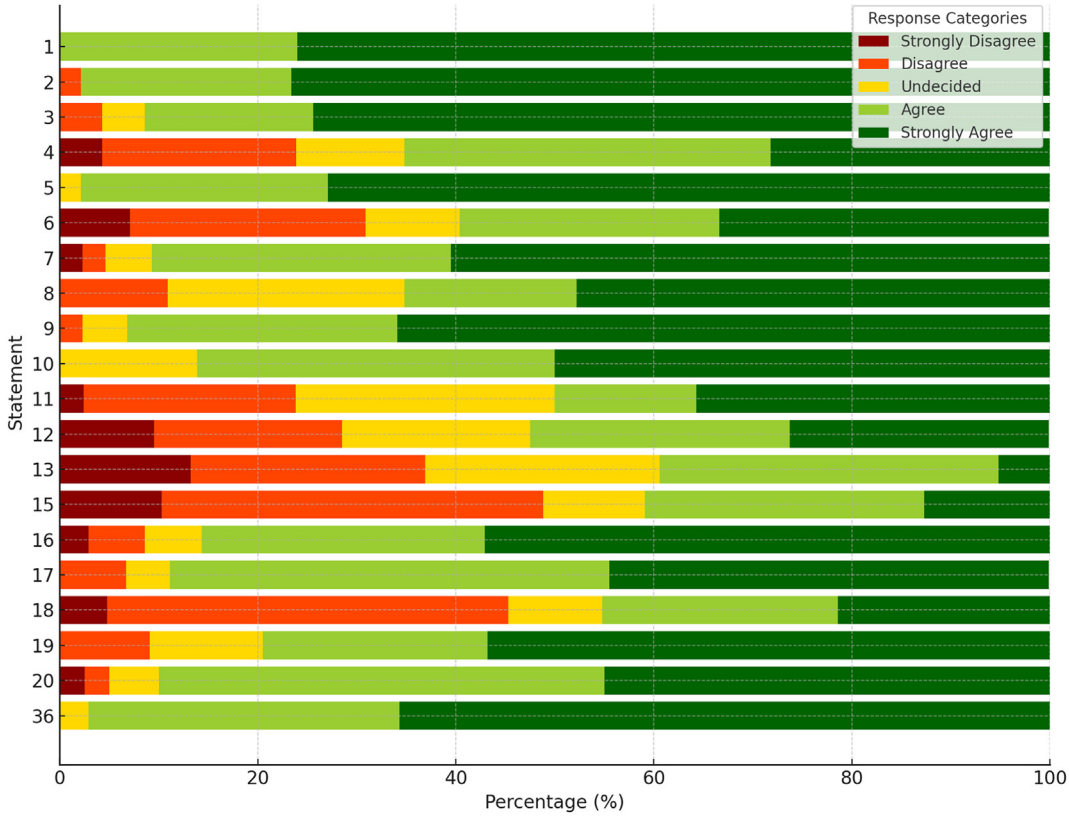

Fig 1. Distribution of agreement for all the statements related to indications for combined procedures.

89.9% agreement). Together, these statements highlight clinical scenarios in which LEAPs in conjunction with ACLR were recommended to reduce graft failure and improve rotational stability. Specifically, the panel strongly recommended LEAP in patients who are widely recognized as being at increased risk of postoperative instability and graft failure, including young, active patients, individuals with high-grade laxity, those with knee hyperextension, athletes returning to pivoting sports, and those undergoing revision ACL reconstruction.

The addition of LEAP to ACLR in young, high-risk individuals or with high-grade pivot shift significantly reduces graft rupture and persistent rotatory laxity without compromising long-term functional outcomes.[19,20] The STABILITY group conducted a randomized controlled trial investigating whether the addition of a LET to single-bundle hamstring autograft ACLR reduces the risk of clinical failure in young, active patients.[8] A total of 618 patients (mean age 18.9 years) were randomized to undergo ACLR with or without LET. Eligible participants (≤25 years) met at least 2 of the following criteria: grade 2 pivot shift or greater, desire to return to high-risk/pivoting sports, or generalized ligamentous laxity. At 2 years postoperatively, the ACLR + LET group had significantly lower clinical failure rates (25% vs 40%, $P < .0001$) and a 67% reduction in graft rupture (4% vs 11%, $P < .001$).

Sonnery-Cottet et al.[21] conducted a long-term cohort study comparing the results of isolated ACLR and combined ACL + ALLR. A total of 86 matched pairs were followed for an average of 104.3 months (8.7 years). Results showed that patients who underwent ACL + ALLR had significantly better graft survival (96.5% vs 82.6%, $P = .0027$) and lower reoperation rates (15.3% vs 32.6%, $P < .05$) compared to isolated ACLR. In addition, the risk of revision ACLR was more than 5 times higher in the isolated ACLR group (17.4% vs 3.5%, odds ratio = 5.549, $P = .0132$). However, there were no significant differences in other complications or patient-reported outcomes between the groups.

Bosco et al.[12] conducted a systematic review and meta-analysis to evaluate the impact of LEAPs, when combined with ACLR, on clinical outcomes. Their analysis, which included 14 randomized controlled trials (1,830 patients), showed that combined ACLR + LEAPs significantly improved knee stability and reduced graft failure rates compared with ACLR alone ($P < .05$). However, no significant differences were found between LET and ALLR, suggesting that both techniques are equally effective in improving pivot-shift

outcomes and patient-reported measures. Other clinical studies that compared ALLR and LET also failed to find important differences between them.[22,23]

Regarding revision ACL reconstruction (R-ACLR), Saithna et al.[24] conducted a review to assess whether the combined procedures offer significant advantages over isolated R-ACLR. The analysis included 8 comparative studies, most of which reported better results with the combined approach. Failure rates ranged from 0% to 13% for R-ACLR + LEAP, compared with 4.4% to 21.4% for isolated R-ACLR. Postoperative side-to-side anteroposterior laxity was lower in the combined group (1.3-3.9 mm) compared to the isolated R-ACLR group (1.8-5.9 mm), and high-grade pivot shift was less common in R-ACLR + LEAP patients (0%-11.1%) compared to those undergoing isolated R-ACLR (10.2%-23.8%).

Similarly, Grassi et al.[25] conducted a systematic review and meta-analysis of revision ACLR, including 8 studies comparing isolated R-ACLR (334 patients) with combined R-ACLR + LEAP (342 patients) with a minimum 2-year follow-up. The results showed a 54% relative risk reduction in failure rates ($P = .004$) and a 68% reduction in high-grade pivot shift ($P = .003$) in the combined group, with no increase in complication rates. There were no significant differences between the different LEAP techniques.

Further support for the inclusion of a LEAP in patients with a high pivot shift or undergoing revision surgery comes from a recent survey of high-volume ligament surgeons attending the 2024 Freddie Fu Panther Sports Medicine Symposium.[26] The panelists agreed that high-grade pivot shift and R-ACLR are the most common indications for LEAPs. The use of combined procedures increased significantly in revision settings—from 68% in first revision to 84% in multiple revision ACL reconstructions—while it was added in approximately one-third of primary ACLR, regardless of graft type.

As reflected in the voting on statement 36, strong consensus was found, indicating that multiple relative risk factors may collectively reach a threshold at which the addition of a LEAP to ACL reconstruction is recommended. Individually, factors such as a small autograft diameter (<8 mm), a Segond fracture or high-grade anterolateral soft tissue injury, a grade 2 pivot shift, or the presence of a deep lateral femoral notch sign do not always require extra-articular augmentation. However, when combined with other considerations—such as meniscal pathology (repair or meniscectomy), female athlete, positive family history of ACL injury, narrow notch width, professional sports demands, or lateral root tears—surgeons may opt for LEAP to reduce the increased risk of graft failure or persistent rotational instability. To date, no evidence-based scores or algorithms can direct decision-making.

Four statements reached a consensus with 75% to 89.9% agreement and highlighted that LEAP may be considered in cases of chronic ACL insufficiency, increased posterior tibial slope, contralateral ACL injury, or in skeletally immature patients. Although the level of agreement was not as strong as in the first group, these findings support the growing body of literature suggesting that secondary risk factors, such as bone morphology or patients' history, including chronic ACL rupture or a prior contralateral ACL injury, may warrant consideration of adding LEAPs.

Chronic ACL injuries differ from acute injuries in that they are associated with greater anterolateral laxity resulting from asymmetric anterior translation of the lateral tibial plateau.[27,28] To fully restore normal knee kinematics, an additional LEAP can be required for effective treatment.[29] In those patients, combined ACL and LEAP has been demonstrated to be an effective and safe solution and to lead to better clinical outcomes than isolated ACLR. Helito et al.[28] conducted a cohort study to evaluate the results of combined ACL and ALLR in patients with chronic ACL injuries. They compared 33 patients who underwent ACLR + ALLR with 68 patients who underwent isolated hamstring ACLR. At a median follow-up of 25 months, 7.3% of patients in the isolated ACLR group experienced graft failure, while no failures were reported in the combined procedure group. Patients who underwent ACLR + ALLR had superior stability results, with better KT-1000 scores ($P = .048$) and a lower incidence of positive pivot shift (9.1% vs 35.3% in the isolated ACLR group; $P = .011$).

An increased posterior tibial slope is associated with high-grade rotatory laxity and a higher risk of subsequent ACL injury.[30,31] A slope greater than 10.1° has been associated with an 11-fold increased risk of ACL graft failure, with the greatest risk observed in individuals with a slope of ≥12°.[30,32] The STABILITY group analyzed predictors of graft failure in young, active patients undergoing hamstring autograft ACL reconstruction with or without LET and included the posterior tibial slope as one of the predictors.[33] Their results showed that a greater tibial slope was associated with an increased risk of graft failure and asymmetric pivot shift. In addition, through multivariate regression analysis—adjusting for factors such as age, medial meniscal deficiency, high-grade knee laxity, and time to return to sport—they found that the probability of graft rupture related to tibial slope angle was reduced when ACL reconstruction was combined with LET.

Different authors emphasize that individuals with a history of contralateral ACL injury have a higher risk of subsequent ACL injury, making them high-risk patients and potential candidates for combined ACL reconstruction with LEAPs to mitigate this risk.[34,35] In

addition, the previous consensus of the Anterolateral Ligament Expert Group recognized a history of contralateral ACL rupture as a secondary criterion for adding a LEAP to an ACLR.[36]

Skeletally immature patients undergoing ACLR have a significantly higher risk of graft rupture compared to adults, with rates as high as 32% reported at long-term follow-up.[37-39] Recent clinical reports of combined ACLR and LEAP have shown significant advantages over isolated ACLR. These benefits include a significantly lower graft rupture rate, ranging from 0% to 13.6%; improved postoperative residual instability outcomes; and no differences in reoperation rates or complications.[40-45]

Nine statements did not reach consensus, reflecting the ongoing debate about the indications for combined ACL reconstruction and LEAP in specific clinical scenarios. Notably, there was insufficient agreement for patients with small-diameter autografts, female athletes, imaging findings of anterolateral lesions, and concomitant meniscal procedures. A possible explanation for the lack of consensus on certain statements is that many of the consensus statements were derived from a research process based on high-quality scientific studies, including several randomized controlled trials. Conversely, the lack of consensus on certain statements may be due to the limited availability of literature on these specific populations. Although there is evidence to suggest that the addition of LEAPs may be beneficial in meniscal repairs,[46] female athletes,[47,48] and small autografts,[49] the available research remains limited and mainly consists of retrospective studies that require further confirmation through higher-quality research.

The consensus on imaging evidence of anterolateral structural lesions may be influenced by the lack of standardized imaging protocols for diagnosing anterolateral complex injuries. Even though some clinical studies suggest the potential benefit of using imaging as an indication, this variability in diagnostic approaches, together with the lack of a definitive association of these findings with a direct beneficial effect of LEAPs, may have contributed to the panel's different responses to statements involving magnetic resonance imaging or the deep lateral femoral notch sign.[50-52]

A statement regarding the use of LEAP in primary ACL repair (statement 14) was removed from the consensus process. The decision was unanimous, as the consensus was primarily focused on ACL reconstruction, and only a small minority of participants had significant experience with ACL repair. Given the limited expertise of the panel members and the distinct differences between ACL repair and reconstruction, it was considered inappropriate to include this statement in the final consensus.

Limitations

First, as consensus statements inherently reflect expert opinion, they represent Level V evidence and are subject to the limitations associated with this type of data.[52,53] The selection and allocation of panel members may introduce inherent bias.[53,54] Despite efforts to ensure broad international representation and multidisciplinary expertise, the predominance of high-volume surgeons and recognized experts who could have a predisposition in favor of LEAPs may have introduced selection bias. The statements' development was not based on a standardized process but was led by a subgroup of the Steering Committee. Nevertheless, participants were given the opportunity to suggest modifications to the statements during each round of the Delphi process, allowing for iterative refinement based on collective feedback.

Conclusions

International experts strongly recommend adding a LEAP in young active patients undergoing hamstring autograft ACLR and in cases of high-grade rotational or anterior laxity, knee hyperextension, revision surgery, or returning to pivoting sports. Unresolved issues include small graft size, female athletes, imaging findings of rotational instability, and concurrent meniscal procedures, highlighting priorities for future research.

Disclosures

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: A.J.K. is a consultant or advisor for Arthrex. R.B.L. has received financial support from Arthrex; is a consultant or advisor for Smith & Nephew; has received speaking and lecture fees from Arthrex and Smith & Nephew; and has received funding grants from Smith & Nephew. R.L. has received funding grants from Ossur, Smith & Nephew, Arthroscopy Association of North America, and American Orthopaedic Society for Sports Medicine; is a consultant or advisor for Ossur, Smith & Nephew, and Responsive Arthroscopy; has received travel reimbursement from Smith & Nephew; has received speaking and lecture fees from Foundation Medical, LLC; and has a patent with royalties paid to Ossur. T.L. is a consultant or advisor for Smith & Nephew and Medacta International SA; has received speaking and lecture fees from Smith & Nephew, Arthrex, and Medacta International SA; has received funding grants from Smith & Nephew and Arthrex; has received travel reimbursement from Smith & Nephew, Arthrex, and Medacta International SA; and has received nonfinancial support from Smith & Nephew. W.L. is a consultant or advisor for Arthrex. G.M. is a consultant or advisor

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Acknowledgments

Arthrex provided valuable support in organizing this meeting. The authors sincerely acknowledge their generous contribution.

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