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ΕΡΕΥΝΗΤΙΚΗ ΕΡΓΑΣΙΑ

Selective percutaneous myofascial lengthening and functional physiotherapy in cerebral palsy Parental perceptions and experiences

OBJECTIVE To explore the perceptions and experiences of parents of children with cerebral palsy (CP), regarding a combined programme of functional physiotherapy and minimally invasive orthopedic surgery, based on the selective percutaneous myofascial lengthening (SPML) surgery. **METHOD** This study was a qualitative research based on thematic analysis. Data were collected using semi-structured interviews with 10 parents of operated children with spastic CP (Gross Motor Function Classification System levels II-IV) after completion of the SPML surgery and 9 months of postoperative physiotherapy. Interviews were conducted either at participants' own home or via telephone depending on participant preference. **RESULTS** Five themes were identified: (a) Issues affecting parental decision-making for orthopedic surgery; (b) preoperative anxiety and postoperative pain; (c) necessity of the intervention; (d) differentiation of postoperative physiotherapy rehabilitation from usual physiotherapy treatment; and (e) parent-reported effectiveness of the intervention. **CONCLUSIONS** According to the parents' opinions, the SPML surgery was a necessary and effective solution to optimize the motor performance of their children with CP. The parents acknowledged the important role of postoperative functional physiotherapy in achieving the functional outcome. The cost, the general anesthesia, as well as the negative attitudes of other specialized health professionals against this orthopedic surgical method, were the issues that concerned the parents before surgery.

Key words

Cerebral palsy
Functional physiotherapy
Interview
Parents
Qualitative research
Selective percutaneous myofascial lengthening

Cerebral palsy (CP) is the most common neurodevelopmental motor disability in childhood, occurring in approximately one in 500 neonates with an estimated prevalence of 17 million people around the world.¹ Children with CP tend to develop a variety of secondary progressive

musculoskeletal problems over time, such as musculotendinous contractures, bony deformities and joint instability,² leading in turn to further motor deficits.³ Orthopedic intervention has a key role in the treatment of secondary musculoskeletal impairments and the improvement of

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motor functioning and psychobehavioural well-being.^{1,3}

The selective percutaneous myofascial lengthening (SPML) represents the latest and newest trend in pediatric orthopedic surgery to treat early or prevent musculotendinous contractures, to promote motor development and to prevent subsequent bony deformities in children with CP.⁴ Based on empirical and scientific data, the SPML surgery is considered as ensuring faster recovery, little to no scarring, minimal postoperative pain, few complications and better clinical outcomes.^{4,5} To date, there has been only one non-randomized controlled trial (non-RCT)⁶ of SPML surgery combined with postoperative functional physiotherapy, which found significant improvements in the gross motor capacity and performance of children with spastic CP when compared to control children who received their usual physiotherapy care. There are few uncontrolled studies, which have also demonstrated favorable outcomes following the SPML surgery in terms of mobility and quality of life.^{5,7-9}

However, making and implementing the decision of an orthopedic surgery for a little child who has CP exposes parents and the entire family to a complex process, causing emotional, psychological, and practical difficulties.^{10,11} To be a parent to a child with CP means more and different difficulties, responsibilities, and concerns than to be a parent of a typically developing child,¹² especially when a parent makes the decision for their child with health problems to undergo an invasive, complicated, and potentially risky medical procedure, such as surgical intervention. Studies of multilevel orthopedic surgery have reported that parents of children with CP have found to have a variety of preoperative and postoperative concerns, including postoperative pain, general anesthesia, surgical scar, infection, and wound problems.^{10,11}

Nevertheless, to date, parents' opinions and concerns regarding the SPML surgery remain unknown. Therefore, the present study aimed to explore perceptions and experiences of parents of children with CP following the SPML surgery combined with postoperative functional physiotherapy.

MATERIAL AND METHOD

Study design

This was a qualitative study embedded within a non-RCT⁶ in order to enhance our understanding and knowledge about the perspective of parents, and through them, of children receiving the SPML surgery combined with functional physiotherapy, while also corroborating the quantitative results.¹³ The quantitative and qualitative part of the study was registered with the Australian New Zealand Clinical Trials Registry (ACTRN12618001535268), and ethi-

cal approval was obtained from the Scientific and Ethical Council of the "Attikon" University General Hospital, Chaidari, Attica, Greece (EBA 2199/14.3.2017), according to the Declaration of Helsinki.

Participants

Parents of children with CP participating in the intervention group of the non-RCT were included. These children received a combined programme of SPML surgery and a nine-month postoperative functional physiotherapy.⁶

Recruitment and data collection

All 26 parents of the children had been informed and consented in writing to participate in a semi-structured interview at the end of the intervention period. Interviews were carried out until data saturation was reached with no substantially new information, ideas and thoughts generating in subsequent interviews.^{14,15}

Each parent was interviewed by the main researcher. Participating parents were offered a choice of the interview medium, which included face-to-face at the family home and telephone. A flexible, but pre-defined, semi-structured interview guide was used, presented in table 1. The semi-structured interview guide was built, with related questions based on the main research question: "What are parents' perceptions and experiences of the combined programme of SPML orthopedic surgery and postoperative functional physiotherapy?" The semi-structured interview guide was developed by the research team with expertise in pediatric neuromusculoskeletal rehabilitation and knowledge in qualitative research.

Interviews were held within four weeks following the completion of the nine-month postoperative functional physiotherapy. All interviews were audio-recorded digitally, using the Voice Memos iPhone application (iPhone 11 Pro Max model, Apple Inc, USA). The audio files were transcribed verbatim in Microsoft Word through voice typing (Microsoft Corp, Redmond, Washington, USA), and were listened to several times to verify for accuracy.

Sample size and data analysis

This study aimed to recruit an initial sample of 10 parents from the intervention children, with potentially further interviews until data saturation was reached.¹⁶ Transcripts were imported into the qualitative software programme NVivo (version 12 for Mac, QSR International Pty Ltd, Doncaster, Victoria, Australia) to organize and manage qualitative data. The six-step thematic analysis procedure¹⁷ was used to capture important concepts and themes in relation to the main research question: (a) Repeated reading and familiarization with the transcripts, (b) generating initial codes, (c) developing themes, (d) reviewing themes, (e) defining and naming themes, and (f) writing the analysis. There was a cyclical process of continuous back-and-forth movement between the six steps as needed, discussing all parts of the analysis until the final themes were agreed and defined. The researchers crosschecked that the

Table 1. Semi-structured interview guide.

| Questions |
|---|
| 1. What are your general impressions of the whole process of the SPML surgery and functional physiotherapy? |
| 2. What is your opinion about the SPML surgery? |
| 3. Do you think it was necessary to have the SPML surgery? Did you make this decision easily? |
| 4. What was the hardest part about making the decision to have SPML surgery? |
| 5. Were you concerned about the SPML procedure? |
| 6. What were your feelings during the SPML surgery? |
| 7. Do you think the surgery was the most stressful thing you have experienced so far for your child? |
| 8. How did your child experience the surgery procedure? |
| 9. How did your child experience the procedure before and after the surgery? |
| 10. Do you think physiotherapy was necessary after surgery and why? |
| 11. What is your opinion about the postoperative physiotherapy programme your child received? |
| 12. Was there any difference between this postoperative physiotherapy programme and the previous physiotherapy programmes your child have received? |
| 13. Was this postoperative physiotherapy program adequate in your opinion? |
| 14. What are your feelings about the postoperative physiotherapy programme your child received? Was it an enjoyable process for you? |
| 15. Was the physiotherapy programme an enjoyable process for your child? |
| 16. Do you think that this combined programme of SPML surgery and functional physiotherapy helped your child? |
| 17. Does the outcome you saw from the combined programme of SPML surgery and functional physiotherapy meet your expectations? |
| 18. How satisfied are you with the outcome of the combined programme of SPML surgery and functional physiotherapy? |
| 19. Did the outcome change the quality of life of your child and your family? |

SPML: Selective percutaneous myofascial lengthening

themes were internally coherent, consistent, and distinctive from each other, and true to the collected data.

RESULTS

Following the completion of the 10th interview, data saturation was reached as no new themes, findings, concepts, or problems emerged from the data.¹⁶ Six of the interviews were conducted face to face and the remaining four by telephone at the parents' convenience. Of the 10 parents, eight were mothers and two were fathers. Two mothers had two operated children with CP (multiple

pregnancies). In table 2 the characteristics of the parents are described.

Five themes revealed through data analysis of parents' responses to the questions as outlined in the semi-structured interview guide: (a) Issues affecting parental decision-making for orthopedic surgery; (b) preoperative anxiety and postoperative pain; (c) necessity of the intervention; (d) differentiation of postoperative physiotherapy rehabilitation from usual physiotherapy treatment; and (e) parent-reported effectiveness of the intervention.

Theme 1: Issues affecting parental decision-making for orthopedic surgery

The surgery cost dominated the parents' responses as the most difficult issue they faced when making the decision to have the orthopedic surgery. For example, a mother characteristically stated: *"Maybe to tell you the truth [laughs], it's the cost [of the procedure]. You see it's not covered [by the public insurance]."* (P. 5; 37-year-old mother of six-year-old twin boys, one of whom improved from GMFCS level III to II, while the other remained at GMFCS level IV). Another mother noted emphatically: *"The cost. Once you find the money, everything is sorted out."* (P. 10; 47-year-old mother of a seven-year-old boy, who remained at GMFCS level III).

Besides the issue of general anesthesia mentioned by some parents, another specific issue that was mentioned and made the decision-making of certain parents difficult involves the negative attitudes of other expert health professionals against such orthopedic surgery. In particular, a mother commented: *"No, [it was a decision] I didn't make*

Table 2. Participant characteristics (n=10).

| Characteristics | Parents |
|------------------------------------|------------|
| Mother/father (n) | 8/2 |
| Age, mean±SD (years) | 42.40±5.95 |
| Annual household income, n (%) (€) | |
| 10,001–20,000 | 4 (40%) |
| 20,001–30,000 | 5 (50%) |
| 30,001–40,000 | 1 (10%) |
| Level of education, n (%) | |
| High-school diploma | 6 (60%) |
| Vocational training diploma | 1 (10%) |
| BSc degree | 2 (20%) |
| PhD degree | 1 (10%) |

BSc: Bachelor of science, PhD: Doctor of philosophy, SD: Standard deviation

easily. I won't deny it, I had booked the same appointment twice and cancelled it, because I hmm... was affected negatively by fellow people, that my child may get worse with the surgery, and advised not to do it. Hmm... Even people working in health care advised me not to, which in retrospect, didn't even know what kind of surgery my child was doing. (...) They mislead me, and they told me that the surgery was going to be painful, my child will suffer for a long time, and none of the above were true. It's amazing!!! (...) This is what made me cancel every time, because I was affected by the above reasons, hmm... especially for all those reasons: The trouble, the chronic pain, my child won't be able to [laughs] do what he is able to do now. So my child would deteriorate. Hmm... they told me that he would be in a wheelchair for a long time." (P. 4; 37-year-old mother of a five-year-old boy who improved from GMFCS level III to II).

Furthermore, the lack of impartiality shown by some parents in favour of the treating orthopedic surgeon seems to have positively influenced the decision to undergo surgery. For instance, a mother discussing the difficulties in making a surgical decision typically said: *"Yes, yes, I made my decision easily because I had absolute trust in my doctor. ...So, I was not worried, no. But, once again, only to this specific doctor" (P. 6; 42-year-old mother of a six-year-old boy, who improved from GMFCS level IV to III).*

Theme 2: Preoperative anxiety and postoperative pain

Another theme that emerged from the parents' responses and views on the SPML surgery was "preoperative anxiety on the part of children and parents, and immediate postoperative pain on the part of children". All but one of the interviewees stated that their children did not show any amount of anxiety or fear before or after the surgery. The parents attributed their children's attitude of sobriety towards surgery to the young age. For example, a mother mentioned: *"Because he was young, he didn't realize the whole process!" (P. 6; 42-year-old mother of a six-year-old boy, who improved from GMFCS level IV to III).*

However, although all the parents expressed their trust in the treating orthopedic surgeon and the anesthesiologist, most of them, in response to a related question, reported experiencing a significant amount of anxiety during their child's surgery. For instance, a mother said: *"Look, yes, because it was very foreign to me; and I was scared, yes, I won't hide that I wasn't scared! But... ok, I trusted [the orthopedic surgeon] and... all went well." (P. 5; 37-year-old mother of six-year-old twin boys, one of whom improved from GMFCS level III to II, while the other remained at GMFCS level IV).* In addition, several parents talking about their

child's surgical and postoperative experience noted little or no pain following the surgery. A mother stated: *"No, there was no indication of pain, may be once or twice he took a painkiller." (P. 1; 41-year-old mother of a seven-year-old boy, who improved from GMFCS level IV to III).*

Theme 3: Necessity of the intervention

All the parents recognized the need of performing the orthopedic surgery to improve their child's motor performance, highlighting the importance of the postoperative physiotherapy and especially the functional approach to the successful outcome of the intervention. For example, a mother pointed out: *"Yes, yes, yes, that surgery was a lifesaver for us, no doubt about that! ...Physiotherapy was necessary because we the parents cannot offer what the therapists offer, no doubt about that! It's a fundamental part of rehabilitation. The surgery on its own would not have had the same result. You do the surgery but for me the physiotherapy is the be-all and end-all." (P. 5; 37-year-old mother of six-year-old twin boys, one of whom improved from GMFCS level III to II, while the other remained at GMFCS level IV).* Additionally, when asked whether physiotherapy is necessary following surgery, one mother very characteristically said: *"Absolutely! To the point where (...) I am not sure if it was the surgery, the physiotherapy, or the combo!" (P. 2; 51-year-old mother of two children, a six-year-old boy, who improved from GMFCS level II to I, and a seven-year-old girl, who improved from GMFCS level IV to III).*

Theme 4: Differentiation of postoperative physiotherapy rehabilitation from usual physiotherapy treatment

Another theme that was particularly commented on by the parents was the significant differences they identified in the postoperative physiotherapy programme compared to the standard physiotherapy treatment. The key difference noted by the majority of parents was that unlike standard physiotherapy, the postoperative physiotherapy involved an intensive practice-based model. For example, a mother specifically said: *"I think it was... a different type of physiotherapy in comparison to what he used to do. For example, the fact that he stood up and did standing exercises: Walking, staying upright. Whereas until his operation all the exercises were done on a ball and mat." (P. 3; 38-year-old mother of a seven-year-old boy, who remained at GMFCS level IV).* Another mother commented: *"When we did the Bobath [method], the child was always on the floor, stretching in all positions. Ok it's good for the muscles, but they wouldn't bother practicing walking. Walking practice only lasted 5–10 minutes." (P. 1; 41-year-old mother of a seven-year-old*

boy, who improved from GMFCS level IV to III). In fact, in response to a question about her opinion regarding the postoperative physiotherapy programme, this mother emphatically said: *"It's the best thing we've done! I believe that if he did Bobath [method], we wouldn't have had the same result."* (P. 1; 41-year-old mother of a seven-year-old boy, who improved from GMFCS level IV to III).

Theme 5: Parent-reported effectiveness of the intervention

Finally, during the discussion, the parents were given the opportunity to position themselves and express their opinions on the effectiveness of the intervention, as it translates into functioning and quality of life, parental expectations, and feelings. All parents recognized the significant contribution of the intervention in promoting the motor activity of their children. For example, a mother emphatically stated: *"Of course! Obviously! Why am I telling you that the result was divine!"* (P. 10; 47-year-old mother of a seven-year-old boy, who remained at GMFCS level III). Questioned on that point, all parents stated that they were very to extremely satisfied with the outcome of the intervention. For instance, a mother forcefully pointed out: *"Not just a lot, very, very, very much improved! Perfect!"* (P. 10; 47-year-old mother of a seven-year-old boy, who remained at GMFCS level III).

Moreover, when describing the general impressions from the intervention, the parents reported the significant changes they noticed in their children's functional mobility. For example, a mother commented: *"There was a huge progress, big difference following intervention. We went from a wheelchair and body support anterior walker to a plain [posterior] walker with no added belts, simply M and his walker. We use walking sticks and have had amazing progress!"* (P. 6; 42-year-old mother of a six-year-old boy, who improved from GMFCS level IV to III).

In the context of the question about whether the result changed the quality of life, all parents highlighted the changes that occurred in the quality of daily life and in the functioning of the child and the family itself after the intervention. An example is a mother, who enthusiastically stated: *"Yes, yes, no doubt! [...] If you consider my child used to walk with a rollator and now, he is an independent walker. [...] I now experience things that I had never experienced before. I am home upstairs, and my child is downstairs playing on his own. Before I couldn't do that, I had to be always there. The difference is clear, no parent should ever consider not having this surgery. If they really want to help their child, they must do it with eyes shut."* (P. 4; 37-year-old mother of

a five-year-old boy who improved from GMFCS level III to II). Furthermore, in response to a relevant question, all the parents revealed that the results of the intervention met, or even exceeded, their expectations. As an illustration, a father characteristically said: *"I never expected that he would have had such great progress! His progress is [...] far more than I imagined."* (P. 8; 53-year-old father of a six-year-old boy who improved from GMFCS level III to level II). However, a mother, despite her satisfaction with the outcome, admitted that she expected something more, influenced by related videos on the Internet: *"I expected something more. Yes, the way I had seen the videos with some kids that hmm... had been operated and I saw the post op video. But obviously not all children have the same problem."* (P. 3; 38-year-old mother of a seven-year-old boy, who remained at GMFCS level IV).

Finally, all parents associated the pleasant feelings they experienced during their participation in the postoperative rehabilitation with their satisfaction with the outcome. For example, a mother commented: *"Yes, hmm... look, when I saw the results, to be completely honest, I didn't get tired of it. I can tell you that when I saw the result on G, I saw my child walk on his own, and all that hard work that everyone had done previous to the surgery, the previous years, whatever, hmm... I forgot everything at once. It was like it had never happened."* (P. 4; 37-year-old mother of a five-year-old boy who improved from GMFCS level III to II). Another mother said: *"Yes [it was a pleasurable process], I saw differences. Only seeing him stand and walk with the therapist's assistance was enough."* (P. 3; 38-year-old mother of a seven-year-old boy, who remained at GMFCS level IV).

DISCUSSION

To our knowledge, this is the first qualitative study to explore parents' perceptions and experiences of the minimally invasive SPML surgery combined with functional physiotherapy. Through the interview, the parents acknowledged the need for orthopedic surgery to improve their children's motor performance. They highlighted the cost of surgery as the main difficulty in the decision-making process. Another issue that concerned some parents pre-operatively was general anesthesia. These findings are confirmed by a study¹⁰ which reported that the high medical cost and general anesthesia are two of the top five issues of concern of the parents of children with CP before multilevel orthopedic surgery. In the present study, the vast majority of participating families had low to moderate annual family income (€ <30,000), which might explain the highest concern that the cost of surgery caused to most parents.

Furthermore, a particular issue that made it difficult

and delayed decision-making for some parents was the negative attitudes of other expert health professionals towards such orthopedic surgery. The poor opinions of some clinicians on this surgical proposal may be a leftover from traditional open tendon lengthening procedures, which are well-known and research-documented to cause potentially irreversible loss of muscle strength and gross motor function.^{18–20} This also seems to be related to the reluctance of some specialist pediatricians and physiotherapists towards an early and timely surgical intervention.²¹ Moreover, in this study the trust expressed by some parents on the treating orthopedic surgeon served as a motivational and reinforcing factor in overcoming any concerns about having the SPML surgery performed. Indeed, considering other studies,¹⁰ reduced experience of the surgeon could create a further climate of anxiety and uncertainty against the orthopedic intervention.

Additionally, in their statements, the parents not only acknowledged the positive effects of this intervention on the walking function and quality of life of their children found by the quantitative research,^{6,8,9} but also expressed their satisfaction with the outcome of the intervention, which for some parents exceeded all expectations. These expectations seem to be held by all parents of children with CP undergoing orthopedic surgery, according to a study²² in Greek parents. The findings of the present study showed that the functional outcome of this orthopedic surgery and rehabilitation programme meets the desires and hopes of the parents, which makes it worthy of recognition and trust.

In the present study, the parent-reported positive effects of the intervention determined the pleasant feelings possessed by the parents throughout the nine-month postoperative physiotherapy. Therefore, the positive outcome of the intervention played a major role in the positive mood of the family, given the negative effects caused by the lengthy process of postoperative rehabilitation on the psychology and mood of the family following multilevel orthopedic surgeries in children with CP.²³ According to a qualitative study,²³ postoperative pain and substantial sleeping problems seem to be important factors in disrupting the family's daily life and tranquility. In the present study, parents reported little to no postoperative pain, which may partly explain the parents' feelings of satisfaction with this orthopedic surgery and rehabilitation programme. This finding confirms previous reports of insignificant and or analgesic-controlled postoperative pain following the SPML surgery.^{7,24} These low levels of postoperative pain may have played a role in the parent-reported lack of anxiety in children, as indicated by studies showing significant association between postoperative pain and postopera-

tive anxiety in children who undergo surgery.^{25,26} Parents attributed the children's good psychological state to their young age. This is explained by some studies,²⁷ which have found that younger children express less pain than older children, but it cannot be stated with certainty due to conflicting conclusions between studies.²⁸

Limitations and strengths of the study

This study had limitations. Two of the parents interviewed had two children who underwent orthopedic surgery, which might have influenced the perceptions regarding the surgical cost. A limitation could also be the duration of the interviews, where 15 minutes might have been too short. However, the interview texts were considered rich in content and contained a great variety of statements and ideas.²⁹ Though there is no consensus on sample size for qualitative research, the findings reflected different perceptions and experiences of parents and thematic saturation was reached.^{16,29}

Based on the Four-Dimensions Criteria model,³⁰ four techniques were taken advantage of to strengthen trustworthiness of the data and rigour of the study. Credibility was enhanced through the audio-tape recordings of the interviews, ensuring the exact words of the respondents were captured, and by continuous discussion of the codes and themes during seven-researcher team meetings.³¹ Dependability was strengthened by having the same researcher to conduct all of the interviews, using the same semi-structured interview guide, and encouraging the participants to speak openly. Confirmability was enhanced through the use of a 15-point checklist of criteria for good thematic analysis.³² Lastly, transferability was strengthened by presenting a detailed description of research process, respondents' characteristics, and findings.

In conclusion, parents' perceptions and experiences on SPML surgery combined with functional physiotherapy have not previously been explored. According to the parents' opinions, this surgical procedure was a necessary and effective solution to optimise the motor performance of their children with CP. The parents recognized the important role played by postoperative functional physiotherapy in achieving the functional goal of the surgery. They expressed their satisfaction with the functional outcome of the overall intervention, which for some exceeded all expectations. The cost, the general anesthesia, as well as the negative attitudes and opinions of other specialized health professionals towards this orthopedic surgical method, were the issues that concerned the parents preoperatively. The trust of some parents towards the treating orthopedic surgeon

played a motivational and reinforcing role for overcoming any concerns about the surgical procedure. The positive effects of the intervention, as well as the parent-reported minimal to no postoperative pain of children, contributed and determined the parents' pleasant feelings from the combined programme of the minimally invasive SPML surgery and functional physiotherapy.

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ΠΕΡΙΛΗΨΗ

Επιλεκτική διαδερμική μυοπεριτονιακή επιμήκυνση και λειτουργική φυσικοθεραπεία στην εγκεφαλική παράλυση. Αντιλήψεις και εμπειρίες των γονέων

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ΣΚΟΠΟΣ Η διερεύνηση των αντιλήψεων και των εμπειριών των γονέων παιδιών με εγκεφαλική παράλυση (ΕΠ) σχετικά με ένα συνδυασμένο πρόγραμμα λειτουργικής φυσικοθεραπείας και ελάχιστα επεμβατικής Ορθοπαιδικής Χειρουργικής, βασισμένης στη χειρουργική επέμβαση SPML. **ΥΛΙΚΟ-ΜΕΘΟΔΟΣ** Η εν λόγω μελέτη αποτελεί μια ποιοτική έρευνα με βάση τη θεματική ανάλυση. Τα δεδομένα συλλέχθηκαν χρησιμοποιώντας ημιδομημένες συνεντεύξεις από 10 γονείς χειρουργηθέντων παιδιών με σπαστική ΕΠ (επιπέδου συστήματος αδρής κινητικής λειτουργίας II–IV) μετά την ολοκλήρωση της χειρουργικής επέμβασης SPML και της εννεάμηνης μετεγχειρητικής φυσικοθεραπείας. Οι συνεντεύξεις πραγματοποιήθηκαν είτε στο σπίτι των συμμετεχόντων, είτε μέσω τηλεφώνου ανάλογα με τις προτιμήσεις των συμμετεχόντων. **ΑΠΟΤΕΛΕΣΜΑΤΑ** Αναγνωρίστηκαν πέντε θεματικές ενότητες: (α) Ζητήματα που επηρεάζουν τη λήψη γονικής απόφασης για την πραγματοποίηση του ορθοπαιδικού χειρουργείου, (β) προεγχειρητικό άγχος και μετεγχειρητικό άγχος, (γ) αναγκαιότητα της παρέμβασης, (δ) διαφοροποίηση της μετεγχειρητικής φυσικοθεραπείας από τη συνήθη φυσικοθεραπευτική αγωγή και (ε) αναφερομένη από τους γονείς αποτελεσματικότητα της παρέμβασης. **ΣΥΜΠΕΡΑΣΜΑΤΑ** Σύμφωνα με τις απόψεις των γονέων, η χειρουργική επέμβαση SPML αποτέλεσε μια αναγκαία και αποτελεσματική λύση για τη βελτιστοποίηση των κινητικών επιδόσεων των παιδιών τους με ΕΠ. Οι γονείς αναγνώρισαν τον σημαντικό ρόλο της μετεγχειρητικής λειτουργικής φυσικοθεραπείας για την επίτευξη του λειτουργικού αποτελέσματος. Το κόστος, η γενική αναισθησία, καθώς και οι αρνητικές στάσεις άλλων ειδικών επαγγελματιών υγείας απέναντι στη συγκεκριμένη ορθοπαιδική χειρουργική μέθοδο αποτέλεσαν τα προβλήματα που απασχολούσαν τους γονείς προεγχειρητικά.

Λέξεις ευρητηρίου: Γονείς, Εγκεφαλική παράλυση, Επιλεκτική διαδερμική μυοπεριτονιακή επιμήκυνση, Λειτουργική φυσικοθεραπεία, Ποιοτική έρευνα

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