

Webinar transcript: Rehabilitation in conflict – Amputation

This is an edited transcript of the webinar. Minor changes have been made for clarity, readability, and accessibility. The content has been structured to support translation tools and screen readers.

Pete Skelton (World Physiotherapy)

Good afternoon, good evening, or good morning, depending on where you are.

Welcome to the fifth session of our webinar series on rehabilitation in conflict. This time, the International Society for Prosthetics and Orthotics (ISPO) are supporting us, and we are covering the topic of amputation in conflict and key considerations.

Thank you all for joining us. I am sure many people are joining after a long, hard day at work, so it is great to have you with us, wherever in the world you are.

The agenda for this evening will begin with opening remarks from **Sandra Ramdial, who is the president of ISPO**. We will then have an introduction to amputation in conflict and discuss the adapted clinical management of amputees.

We will cover common complications, challenges, adapted rehabilitation practices, important considerations, and key points, and then we will have plenty of time for questions and discussion.

Thank you again, Sandra, to you and all ISPO for your support in arranging this webinar. It is great to have you and the team on board.

Without further ado, it is my immense pleasure to hand over to Sandra Ramdial from ISPO. Over to you to walk us through the rest of the evening.

Sandra Ramdial (International Society for Prosthetics and Orthotics – ISPO)

Thank you for the kind introduction, Pete. It is really a pleasure to be here.

Hello, everyone. Wherever you are joining from, it is great to have you with us.

I come to this not only as ISPO president, but also as a certified prosthetist in Canada with over 35 years in the field. This is something I care deeply about, and, for today's topic, it is especially important that early care includes all those working in orthotics and prosthetics from the very beginning.

Amputation in conflict settings must be recognised not only as an emergency surgical intervention, but as the beginning of a lifelong health condition that requires a coordinated, system-level response. When that happens early, and when it happens together, the outcomes can be completely different.

At its core, this is about people working together. When that kind of coordination happens, you do not just see recovery, you see possibility.

But we also know it is not always straightforward. In many settings, early rehabilitation is challenged by things beyond the clinic: policies that create delays, supply chains that do not reach where they are needed, and equipment that simply is not available at the right time.

These barriers are real and they directly affect outcomes, which is why collaboration and coordination at every level are so important. It is not just what we can do today, but what continues tomorrow and beyond.

At ISPO, this is central to our work across prosthetic and orthotic, mobility, and assistive technologies. We focus on strengthening the full continuum of care, from those early moments through to customised treatment and care and lifelong rehabilitation.

If you have not already, I would encourage you to visit the ISPO website to learn more. We have made it a priority to keep membership accessible, including very low fees for our colleagues in developing countries, because this is a global community and everyone should be part of it.

Looking ahead, we are organising our next World Congress in Thailand in May 2027, and I truly hope to see many of you there and connect in person.

It is the interdisciplinary team - surgeons, therapists, prosthetists and orthotists, nurses, mental health, and psychosocial support providers, and all those involved in rehabilitation — coming together around one person. It is not just about treating an injury, but understanding a life, their environment, their daily realities, and their goals.

Now, on to our partnership with WHO. This is grounded in a shared belief that prosthetic and orthotic services are not optional in emergencies. They are essential.

They are essential for recovery, for independence, for participation, for function, and for quality of life.

It is essential that care is person-centred, evidence-informed, and delivered within a continuum of care from acute management through rehabilitation to prosthetic provision.

Prosthetic and orthotic services should be formally integrated into national health systems and emergency preparedness, not treated as optional or secondary services.

Failure to do so risks preventable disability, loss of independence, and long-term societal costs.

This presentation, delivered together by a physiotherapist and a prosthetist, highlights the need for clear standards, coordinated interdisciplinary care, and sustained investment to ensure that survival is matched by functional recovery and meaningful participation in society.

As you move through today's session, I hope you take away not only practical insights but also a sense of connection to each other and to this global effort to strengthen rehabilitation where it is needed most.

Thank you for being here. Over to you, Rouba.

Rouba Mitri (International Committee of the Red Cross – ICRC)

Thank you so much, Sandra, for the lovely introduction.

Hello, everyone. Greetings from Lebanon.

I am Rouba Mitri, a physiotherapist with the International Committee of the Red Cross. I will be with you today in this webinar and we will talk about amputation in conflict. I will hand over to Anton to introduce himself.

Anthony Johannesson (ISPO Nordic)

Thank you. My name is Anthony Johannesson. I am a prosthetist orthotist from Sweden and representing ISPO Nordic. I am really pleased to be here.

Presentation

Rouba Mitri (ICRC)

The title of the session today is Amputation in Conflict.

Amputee rehabilitation is a complex journey. Today, we will highlight the most critical aspects of amputation care in conflict settings.

On this slide, we highlight the key principles of managing limb loss and rehabilitation.

A person-centred approach

First, we focus on a person-centred approach rather than just the remaining limb.

What does this mean? It means we treat the individual, considering their goals, lifestyle, and personal needs, not just the physical injury and not just the limb.

An interdisciplinary team

Second, rehabilitation should involve an interdisciplinary team approach. This team can include doctors, physiotherapists, prosthetists, psychologists, and social workers, all working together to provide comprehensive care.

Continuity of care

Another crucial point is continuity of care, which starts from the moment of injury and continues through prosthetic fitting and beyond.

Limb loss is considered a lifelong condition, meaning individuals may require ongoing support and continuous follow-up care.

It is also important to remember that anyone can be affected: civilians of all ages, from children to adults and older people. Care must be adaptable to different life stages.

Environmental consideration

Finally, we consider the person's overall environment, including their home, community, and access to services. These factors can influence rehabilitation outcomes and quality of life. Today, we will focus on amputation in conflict settings.

What makes amputation in conflict settings different?

First, there are specific challenges in conflict, such as a higher risk of infection due to delayed treatment, poor sanitation, limited medical resources, and limited access to healthcare.

Patients often also have associated injuries, such as polytrauma, fractures, burns, and internal trauma, which make their condition even more complex.

We also need to consider non-communicable diseases, such as diabetes, as well as possible additional epidemics, which can affect healing and recovery.

Lower limb amputations tend to occur more than upper limb amputations, especially in conflict situations involving blast injuries and mines.

Finally, an important concept is that a well-functioning amputated limb can be better than a painful, non-functional leg. However, this idea is always difficult for a patient to accept.

Overall, managing amputation in conflict requires adapting to complex injuries and challenging conditions while focusing on the best functional outcome for the patient.

Now, we will move to adapted clinical management and talk about surgery.

Surgical management

An important principle in surgical management is life before limb and limb before length.

What does this mean? It means the priority is to save the patient's life first, then preserve the limb if possible, and only after that consider limb length.

This principle is especially relevant in conflict settings, where injuries are often severe. Resources are often limited and rapid decisions are needed to control bleeding, prevent infection, and reduce the risk of death.

The main goal is to create a well-healed residual limb that can support effective prosthetic use at a later stage.

Amputation is indicated in cases such as severe ischemia, non-viable tissue, or where there is an elevated risk of infection and sepsis.

In complex settings, delayed primary closure is commonly used. In many cases, wounds are contaminated, so they are left open for around one to four days before closure. This helps to reduce infection risk and improve healing outcomes.

In complex settings, secondary amputation or revision surgery is an important aspect. It is often performed after the initial surgery, where the conditions were difficult.

During the initial surgery, there may have been limited time, limited resources, contamination, and concern about the overall health condition of the patient. All of this may not allow for an optimal level of amputation.

The aim of revision is to improve the functional outcome for prosthetic use later. The key idea is to preserve the most distal level possible, if the remaining bone and soft tissue are viable.

Here, I must stress a critical point: we need good soft tissue coverage. If the choice is between bone length and good, healthy soft tissue coverage, soft tissue coverage is more important in the early post-operative phase.

A back slab is often used to maintain knee extension. In this case, we are talking about someone who has a below-knee amputation, and the goal is to prevent contractures and knee flexion.

In some cases, a through-knee amputation may be considered as an alternative to a transfemoral amputation. If there is a choice between a short below-knee amputation and a through-knee amputation, the through-knee amputation can be considered because it can provide better weight-bearing capacity and potentially improve prosthetic control.

Pain management and antibiotics

Another key aspect is the rational use of antibiotics, especially in complex settings where the risk of infection is high. Antibiotics should be used carefully to prevent and control infection without overuse or misuse, as this can contribute to the development of multidrug-resistant bacteria.

Pain management is also crucial in amputation. The goal is not only to treat pain once it appears, but to do the best possible to prevent it from becoming chronic pain.

Proper drug management can help reduce the risk of neuropathic pain, which is a long-term complication after amputation.

It is important to provide pain relief before mobilisation and physiotherapy sessions, and before dressing changes. Care for pain should also be coordinated with mental health and psychosocial support services.

Finally, peer support plays an especially key role, as patients often benefit from sharing experiences with others who have gone through similar situations.

Daily monitoring

We need to regularly check the limb for any signs of bleeding, delayed healing, or infection. We should check for things like redness, swelling, and unusual discharge.

Right after surgery, a surgical compression dressing is usually applied. This helps to control swelling, protect the wound, and support healing.

After that, we move to intermittent compression. This continues to control swelling but also starts preparing the limb for the next stage.

Bandaging is another key step. It is used to shape the residual limb properly and prepare it for fitting a prosthesis later.

We must not forget positioning, which is another key point. If the limb is kept in the wrong position for too long, it can lead to contracture.

The most common contracture we might see for a below-knee amputation is knee flexion. For an above-knee amputation, it is hip flexion and hip abduction.

Finally, we cannot overlook nutrition. Good nutritional support promotes wound healing, strengthens the immune system, and helps the patient recover more effectively overall.

MHPSS

People who experience amputations are not only dealing with physical trauma, but also with severe psychological stress. That is why mental health and psychosocial support is considered lifesaving.

Raising awareness about MHPSS is particularly important, particularly in conflict zones where mental health is often overlooked. Many patients may not recognise their psychological needs.

Basic psychological support should be considered a population-wide need in conflict settings. Large numbers of people — patients, families, and even healthcare workers — are exposed to trauma.

It is also important to remember that both patients and responders need support, and this type of support does not always require a specialist. Trained non-mental health professionals can provide basic psychological support, which is especially important in resource-limited conflict settings.

We must not forget the need for follow-up, because the emotional impact of amputation can persist or even appear later over time.

When it comes to adapted clinical management in nursing, we focus again on what was mentioned earlier: a person-centred approach.

It is important not only to care for the amputated limb. These patients often have other health conditions, such as ischemic heart disease or diabetes. Things become even more complicated with diabetes. We cannot overlook the other lower limb. We cannot overlook examining the other lower limb.

In conflict settings, these conditions are often poorly controlled because of limited access to healthcare, so managing these comorbidities is essential for proper recovery.

In this case, both the patient and the family need to be educated and need to understand wound care, red flags, signs of infection, how to manage the limb, what to expect during recovery, what is normal, and what is not normal.

Discharge planning is also important. I am using the word planning because this should be a plan developed by the interdisciplinary team: doctors, nurses, P&O, physiotherapists, social workers, and psychologists. This should be an interdisciplinary discharge.

Finally, we need to advocate for regular referral, not just when a problem appears, especially in unstable environments where patients may only seek care when complications arise. This can delay treatment and worsen the outcome.

Now, for the next slide, I will give the floor to Anton.

Anthony Johannesson (ISPO Nordic)

Thank you, Rouba.

I want to repeat some of the common complications that Rouba mentioned in the post-operative phase. Several complications can significantly affect rehabilitation and prosthetic outcomes.

Delayed wound healing and prolonged immobilisation can slow progress and increase the risk of further complications.

Contractures often result from inactivity and may prevent successful prosthetic fitting.

Residual limb pain and phantom pain should be addressed early to avoid long-term issues.

In addition, neuroma formation can reduce prosthetic tolerance.

Finally, scar placement is critical. A scar in a weight-bearing area can compromise socket fit, comfort, and function.

Blast injuries are complex and challenging to treat due to the combination of injury mechanisms. Patients are often exposed to pressure waves, shrapnel, burns, and blunt trauma at the same time.

In addition, internal injuries may not be immediately visible, with damage to the lungs, brain, or organs developing over time.

These patients frequently present with severe polytrauma, including fractures, soft tissue loss, and traumatic amputation requiring coordinated multidisciplinary care.

The risk of infection is high, as wounds are often heavily contaminated, which can delay healing.

Finally, survivors typically face long-term rehabilitation needs, including repeated surgery, prosthetic care, and psychological support.

Often, the problem is not only the injury. It is a lack of coordination.

I will continue with the next slide on common complications.

Rehabilitation must start early, not after healing, but during healing.

Poor early management can significantly compromise long-term outcomes.

Incorrect positioning can lead to contractures, particularly knee flexion and hip flexion or abduction, or a combination, which can limit prosthetic fitting and function.

The shape of the residual limb is also critical. Bulbous or conical forms, often due to inadequate soft tissue management, can create challenges for socket design and comfort.

In addition, there is often insufficient consideration of the patient's overall condition, especially in cases of multiple injuries.

Patients with multiple limb loss or associated injuries, such as burns or skin grafts, present additional complexity, particularly regarding skin integrity .

Finally, psychosocial factors play a significant role and can significantly influence rehabilitation outcomes if not addressed early.

This is where we start shaping the future of prosthetic users.

Rouba Mitri (ICRC)

Thank you.

Under adapted rehabilitation practice, we mention that early mobilisation is important to prevent complications.

Positioning is a key aspect in preventing contractures. As mentioned earlier, the main deformities we might face are knee flexion, especially if there is a short stump, and hip abduction and hip flexion, also especially if there is a short stump.

We therefore care for the position of the patient in every situation: in bed, while sitting in a wheelchair, and while ambulating. The knee should be kept extended where appropriate.

While ambulating, patients may tend to walk on crutches while flexing the knee and hip, as this is like a resting position. All these things should be considered to prevent contractures and deformities.

As mentioned earlier, bandaging has a key role in helping to control oedema and reshape the stump to prepare for the later stage, which is prosthetic use.

At the same time, we need to look at the whole person, not just the stump.

We also include pre-prosthetic fitting activities, such as basic strengthening and balance exercises. We will elaborate more on pre-prosthetic fitting in the upcoming slides.

We must not forget education for both patients and families, and education on post-fitting rehabilitation.

Finally, peer support is valuable, as it helps patients feel less isolated and more motivated during the recovery phase.

Familiar challenges in conflict settings

Due to limited resources, there is often a lack of specialised expertise and a lack of a proper interdisciplinary approach. This can lead to issues such as poor positioning, incorrect bandaging, and not fully respecting the patient's pain.

We also see complications such as secondary wounds or injuries. Often, because conditions are not ideal, hygiene is poor, wounds may be infected, the patient may not be ambulating independently, and there may be a risk of falls. This can lead to secondary complications.

Another challenge is rushing the process. We should never rush the process, such as fitting a prosthesis before complete healing, because this can negatively affect the outcome.

Basic aspects like nutrition are sometimes overlooked, even though they are essential for good recovery.

Additional common challenges include the lack of assistive devices, which makes early mobilisation and independence more challenging and more difficult.

We also see limited attention to the psychological status of patients, even though trauma and emotional distress are extremely high in conflict situations.

Daily functioning is also affected, with difficulties accessing basic activities of daily living and more complex tasks such as instrumental activities of daily living.

In conflict settings, patients are often discharged too early due to pressure on services, and unfortunately follow-up is frequently lost.

There is a key point to make in any civil conflict situation: always take the patient's information and data. You never know when you might need to refer the person to a certain service they need.

Another challenge is early or inappropriate prosthetic fitting without respecting the proper timing and without doing the proper preparation, which will affect the outcome.

Finally, services are often uncoordinated, which makes continuity of care difficult.

Pre-prosthetic rehabilitation

Here, we are focusing on pre-prosthetic rehabilitation, which is an especially important stage. It is not optional if you want a successful outcome. It can take around two months for a patient to be ready.

This phase starts with correct positioning, postures, and stretching to prevent complications such as contractures.

We also work on strengthening exercises to prepare the body for using a prosthesis, along with desensitisation techniques to help reduce the sensitivity of the residual limb and prepare it for the prosthesis.

Oedema control and shaping the residual limb are also particularly important. This is usually achieved through compression therapy, which can be done using elastic bandaging applied in a figure of eight.

Pain management is also essential, and the approach in people with amputation is quite specific.

It should start by properly identifying the type of pain: whether it is phantom limb sensation, which is generally normal and often does not require treatment; phantom limb pain, which needs attention through appropriate medication and physiotherapy; or residual limb pain with an underlying cause, such as oedema, infection, skin irritation, or pressure points.

At the same time, we focus on functional independence, such as transfers, basic mobility, and improving balance to prepare the patient for working with a prosthesis.

Over to you again, Anton.

Anthony Johannesson (ISPO Nordic)

If I summarise: understanding the environment, working as a team, starting rehabilitation early, and focusing on function and participation. These are simple recommendations, but there is a lot of complexity behind them.

The best way to motivate someone who has lost a leg is to prepare them for prosthetic fitting and the possibility of receiving a prosthesis.

A well-prepared residual limb is essential for successful prosthetic fitting and long-term function.

The limb should have intact and healthy skin, with good sensation to allow feedback and protect against injury.

It should be as pain-free as possible in weight-bearing areas, ensuring comfort during prosthetic use.

Adequate range of motion, particularly in the hip and knee, is critical to enable efficient movement.

In addition, good hip extension strength and overall muscle strength are key to achieving stability and control during gait.

In emergency settings, the global response significantly shapes how treatment is delivered. Flexibility and the ability to adapt are essential to meet rapidly changing conditions.

At the same time, international guidelines must be respected to ensure safe and consistent care.

It is important to maintain a continuum of care, preparing early for the prosthetic fitting phase while taking the local context and available resources into account.

Finally, effective communication and coordination with all stakeholders are critical to ensure aligned efforts and optimal patient outcomes.

In conflict or disaster settings, it is essential to first understand the environment and adapt care accordingly.

A person-centred approach should guide all interventions, considering not only injuries related to the event but also pre-existing health conditions.

Care must be planned based on available resources while ensuring effective communication and coordination with stakeholders.

Over to you, Rouba.

Rouba Mitri (ICRC)

We mentioned again how MHPSS is vital because amputation in conflict is not only a physical injury, but also a major psychological and social trauma.

A strong interdisciplinary team approach is needed for good outcomes.

Lastly, we always need to consider activities of daily living, but in a way that is adapted to the patient's level of impairment and their environment, especially in conflict settings where resources and conditions can be limited.

Overall, successful care is not just about healing the limb, but also about restoring function, independence, and quality of life in a challenging context.

Thank you, everyone, for your attention.

Q&A session

In acute amputation care, wound healing and early discharge often delay techniques such as desensitisation, bandaging, and scar management. How can timely intervention be ensured without compromising outcomes in high-turnover settings?

Anthony Johannesson (ISPO Nordic)

In prosthetic care, wound healing and delayed wound healing are always challenging. The main goal is what Rouba said: if we start too early in providing the prosthesis, before the limb has fully healed, it can damage the outcome. This also depends on what kind of prosthetic technology you are offering. In some settings, the quality of prosthesis is incredibly low, which requires a strong and healthy stump to work with. That kind of challenge is more the answer to the question than the problem itself.

When can weight-bearing begin after stump revision or secondary amputation, and is it better to delay it to avoid complications?

Anthony Johannesson (ISPO Nordic)

That is a very good question. Starting weight-bearing can have a positive effect for the person who has had an amputation, because then they can stand and try to walk again.

The psychological effects are particularly good, but if you start too early, you can get a backlash. The patient can experience pain, or oedema can affect the fitting. I would rather train the patient without a prosthesis to make them stronger, and fit them when they are more prepared, than go too early.

Are there evidence-based manuals or self-guided rehabilitation guidelines that can be shared directly with amputees in settings where rehabilitation services are severely limited or disrupted, such as Gaza?

Anthony Johannesson (ISPO Nordic)

I do not have the most experience on that, and I have not seen any manual that works in that kind of setting. That is what we are trying to do with this presentation and this effort: to raise standards and encourage those in charge of these situations to allow us to help.

It is not only one profession, or even many professions, which need to be in place to help. I am not aware of any simple solution without resources. It is almost impossible, I am afraid.

Subhash (Moderator)

When I was in Gaza, we had an ICRC pre-prosthetic manual that helped guide management in a pre-prosthetic way. We also have physiotherapy guidelines on pre-prosthetic rehabilitation from the ICRC side, which are available on the ICRC website and can also be shared with the group.

What should the discharge criteria be for a patient with amputation leaving hospital?

Rouba Mitri (ICRC)

Whenever we want to discharge a patient, we should always ask about their home situation and circumstances. The patient should be independent on crutches where appropriate, especially if they have stairs or rough ground around the home environment. If the patient is a double amputee and is using a wheelchair, they must be trained in wheelchair mobility.

From a nursing care perspective, the family and patient should be educated on hygiene, wound dressing, and signs of complications. We should always collect and retain the patient's full information before discharge in case referral or further follow-up is needed.

As a physiotherapist, how can you support someone experiencing phantom limb pain?

Rouba Mitri (ICRC)

First, we need to correctly identify the type of pain.

Sometimes the patient has phantom limb sensation rather than phantom limb pain, which is normal and does not necessarily require treatment. If it is phantom limb pain, physiotherapy interventions can include desensitisation techniques and mirror therapy.

Mirror therapy is a way of helping retrain the brain by reflecting movement from the unaffected limb. Patients should be educated on how to carry this out consistently.

What are your recommendations for improving continuity of care and rehabilitation quality in conflict-affected regions?

Rouba Mitri (ICRC)

Amputation rehabilitation is a process.

Physiotherapists have a role in pre-fitting and post-fitting, while mental health professionals, prosthetists and orthotists, nursing teams, and others all have a role to play.

Care for amputees does not stop when the patient leaves hospital. Referral is key. Patients need to understand the importance of pre-prosthetic rehabilitation before prosthetic fitting.

We should refer patients to rehabilitation centres, ensure follow-up through MHPSS and P&O services, and continue supporting them through prosthetic use. We should also think beyond rehabilitation and towards social inclusion, helping people re-engage in society, sport, and independent living.

How can person-centred care be better applied in low-resource settings?

Subhash (Moderator)

A person-centred approach can be maintained in low-resource settings.

An interdisciplinary team approach is important wherever possible, with professionals coordinating and supporting each other. We also need to ensure continuity of care so that patients are appropriately linked and referred through the rehabilitation pathway.

When should prosthetic measurement and fitting begin in conflict-related amputations, and how do you balance early rehabilitation with stump readiness?

Anthony Johannesson (ISPO Nordic)

There is not only one factor involved. There are multiple factors, including the healing process, oedema control, and access to pre-prosthetic care.

All this needs to be in place before measurements or casting begin. Otherwise, the patient's limb volume may change rapidly once they become mobile. The first year after amputation is particularly critical, because this is when most volume changes occur.

I would also emphasise that amputation care requires sustainable services. It is not something that can be done once and forgotten. Long-term follow-up is essential.

What are the key rehabilitation challenges for a young diabetic patient with a below-knee amputation, and how would you prioritise interventions?

Rouba Mitri (ICRC)

For me, the most important thing is protecting the remaining lower limb.

The remaining limb must be checked carefully for sensation, neuropathy, wounds, and circulation. Patients need to understand that the prosthesis is intended to improve independence and reduce load on the remaining limb.

Medical follow-up is essential, including medication management and monitoring vision, which can affect safety when using a prosthesis. Diabetes management is not only about the amputated limb, but about the patient's overall health condition.

Anthony Johannesson (ISPO Nordic)

The remaining limb is extremely important, and one purpose of prosthetic provision is to help distribute load more evenly. However, it is challenging, especially without access to medication and proper follow-up. Education of the patient and family is also essential.

Is there a criterion for when weight-bearing can begin on an amputated limb?

Anthony Johannesson (ISPO Nordic)

It depends heavily on the type of prosthetic technology available.

With some total surface-bearing prosthetic systems, limited weight-bearing on small wounds may be possible and may even improve circulation and healing. However, if that technology is not available, early weight-bearing may jeopardise healing. The prosthetist must carefully judge that balance.

How can physiotherapists contribute early to the amputation care pathway before the patient reaches the rehabilitation phase?

Rouba Mitri (ICRC)

Pre-prosthetic rehabilitation is essential and should never be considered optional.

Physiotherapists should focus on positioning, oedema control, strengthening exercises, stretching, transfers, wheelchair mobility, balance, and functional independence.

Upper limb and trunk strength are also extremely important. Pain should always be assessed carefully, including identifying whether it is phantom limb sensation, phantom limb pain, or residual limb pain.

How should patients progress from walking frames to crutches and eventually prosthetic use?

Rouba Mitri (ICRC)

For a young patient, I would aim for crutches rather than a walking frame where possible. I would usually recommend elbow crutches over axillary crutches because prolonged use of axillary crutches can cause upper limb compression and pain.

However, if the patient has poor balance or polytrauma, it may be appropriate to begin with a walking frame before progressing to crutches. Patients who will return home to environments with stairs should be trained appropriately on crutches before discharge.

Closing remarks

Sandra Ramdial (ISPO)

Absolutely. That is fantastic.

I will hand back to Pete for any final remarks, but before I do, I would like to thank the speakers for their fantastic presentations.

Thank you also to Subhash for managing the questions in the chat. I really appreciate that. And to every one of you on this call — at one point I saw 250 people joining from all over the world — we want to say a big thank you.

We are available as a resource, so please connect with us if there are any further questions. I will end there and hand back to Pete. Thank you, everyone.

Pete Skelton (WHO)

Thank you so much, Sandra.

Thank you to all ISPO colleagues for a wonderful session. There was a huge amount of detail in the questions, which shows how interested people are in this topic, which is brilliant.

Thank you also to World Physiotherapy for hosting and for all the support behind the scenes, especially as I know it is a public holiday in the UK, where many of you are based today. That is very much appreciated.

Thank you also to the interpreters, who are volunteering and doing an amazing job in keeping this moving forward.

Next week, we will be focusing on burns, which is an incredibly important topic in emergencies. We see this particularly in conflict settings, where many patients — including those with amputations and other injuries — may also experience burns because of blast injuries.

It is an important topic, and we will be supported by Interburns, who will be managing next week's session.

Thank you again to everyone for attending. Thank you to ISPO and thank you to everybody behind the scenes who is supporting this series.

If you require this transcript in an alternative accessible format, please contact World Physiotherapy.