



CRE REPORT ADVANCEMENT OF UPPER EXTREMITY PROSTHESIS 21ST AND 22ND JULY 2023



आयोजक / Organized by:
Department of Prosthetics & Orthotics
राष्ट्रीय गतिशील दिव्यांगजन संस्थान
National Institute for Locomotor Disabilities (Divyangjan)
(दिव्यांगजन सशक्तिकरण विभाग, सामाजिक न्याय एवं अधिकारिता मंत्रालय, भारत सरकार)
(Department of Empowerment of PwDs (Divyangjan), Ministry of Social Justice and Empowerment, Govt. of India)
बी.टी. रोड बनहुगली, कोलकाता-700090 / B.T. Road, Bon-Hooghly, Kolkata-700090

The two-day program on the Advancement of Upper Extremity Prosthesis, organized by Department of P&O, NILD, took place on 21st and 22nd July 2023. The event saw a total of 45 participants attended the sessions, including professionals, students, and experts in the field of Prosthetics and Orthotics.

Inauguration

The event kicked off with great enthusiasm and anticipation, as esteemed guests and speakers graced the occasion. Dr. P. P. Mohanty, Director, was the Chief Guest, and Prof. (Dr.) A. K. Pal, Former Professor and Head of the Dept. of Orthopaedics & Traumatology IPGMER SSKM Hospital Kolkata, was the Guest of Honor. The Keynote Speaker, Dr. P. K. Lenka, Officiating Deputy Director and Head of the Dept. of Prosthetics and Orthotics, delivered an inspiring speech, setting the tone for the event. Dr. A Biswas was said about current status of the research at Nild. Hasan Md Arif Raihan, the Program Coordinator, delivered the welcome address to welcome attendees, guests, speakers, students and organizers in this 2 days CRE program.



Programme Schedule



National Institute for Locomotor Disabilities (Divyangjan)
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Programme Schedule CRE on Advancement of Upper Extremity Prosthesis 21st and 22nd July 2023

Day 1		
Time	Topic	Resource Person
9.00 am to 10:00 am	Registration (Dr. Poly Ghosh & Dr. Sainrabha Mishra)	
10.00 AM to 10:40 AM	Inauguration	
10:40 AM to 11 AM	Tea break	
11 AM to 11.45 AM	Upper Extremity Amputations and Current Surgical Management	Prof (Dr.) A K Pal Former Professor, Head, Dept. of Orthopaedics & Traumatology IPGMER SSKM Hospital Kolkata
11.45 AM to 12.30PM	An Overview of Upper Extremity Prosthesis: Past, Present and Future.	Dr. P. K. Lenka, DDA (Offg.) & Head Dept. of P&O.
12.30PM to 1.15PM	Assessment, evaluation, control strategies of Bionic hand Prosthesis	Dr. Shubham Agrawal
1.15PM to 2PM	Lunch	
2PM to 2.45PM	Prosthetic socket for Bionic hand Prosthesis	Dr. Shubham Agrawal
2.45PM to 3.30PM	Bionic hand Prosthesis fitting and its Challenges.	Dr. Shubham Agrawal
3.30PM to 4.15PM	Recent trends in Upper Extremity Socket Technology.	Dr. Poly Ghosh, Lecturer (P & O), NILD, Kolkata
4.15PM- 5.00PM	Discussion and QA	Dr. Arif Raihan & Dr. Dhruji Sundar Das, Lecturer (P & O)
Day 2		
Time	Session	Topic
9.30 AM to 10:00 AM	Myo-Electric Prosthesis principles and control: An overview	Dr. Rahul Dokania
10.00 AM to 10:45 AM	Demonstration of Myo-Electric Prosthesis operations	Dr. Rahul Dokania
10:45 AM to 11.30 AM	Cast taking procedure of a suitable socket for myo electric Prosthesis	Dr. Rahul Dokania
11.30 AM to 12.15 PM	Mould Modification	Dr. Rahul Dokania
12.15 PM to 1.30PM	Socket Fabrication and Fitting	Dr. Rahul Dokania
1.30PM to 2.15PM	Lunch	
2.15PM to 2.45PM	Prehension and restoring hand functional for Myoelectric Prosthesis users.	Dr. Tannava Pany
2.45PM to 3.30PM	Outcome measures in Upper Extremity Prosthesis.	Dr. Abhishek Tripathi
3.30PM to 4.15PM	Discussion and QA	Dr. Prakash Sahoo & Dr. Sainrabha Mishra, Lecturer (P & O)
4.15PM- 5.00PM	Valedictory, Certificate distribution and Vote of thanks: Hasan Md Arif Raihan, Program Coordinator	

In a Q&A session at a conference or seminar for CRE delegates, organizers may use Multiple-Choice Questions (MCQs) as a method to assess the delegates' understanding of the presented topics. This approach can be beneficial for several reasons like efficient Assessment, Objective Evaluation, Knowledge Verification, Feedback and Learning, Identifying Knowledge Gaps. Remember that the specific details of the evaluation, such as the number of MCQs, difficulty level, and content areas covered, would depend on the event's objectives, the level of the delegates and the specific topics covered during the CRE. Feedback report of the CRE also assessed.

Scientific Session

The first session of the day was conducted by Prof. (Dr.) A. K. Pal, who spoke about Upper Extremity Amputations and Current Surgical Management. His vast knowledge and experience in the field provided valuable insights into the latest surgical techniques and approaches for managing upper extremity amputations.



Next, Dr. P. K. Lenka took the stage and presented an Overview of Upper Extremity Prosthesis: Past, Present, and Future. He highlighted the evolution of upper extremity prosthetics over the years, discussing the advancements in technology and the promising future prospects for patients in need of such prostheses.



Workshop/Practical Demonstration

The third session was led by Dr. Shubham Agrawal, who covered various aspects of Bionic Hand Prosthesis, including assessment, evaluation, control strategies, fitting challenges, and the latest trends in Upper Extremity Socket Technology. His comprehensive presentation shed light on the cutting-edge developments in this specialized area of prosthetics.



Fourth Speaker Ms. Poly Gosh explained about the recent trends in upper extremity socket technology have been focusing on improving comfort, functionality, and performance for individuals with limb loss or limb differences. Some of the notable developments include: Socket Material Advancements, 3D Printing, Socket Interface Technology, Smart Prosthetics, Targeted Muscle Reinnervation (TMR), Osseointegration etc.



Day-1 Q & A Session

After the enlightening sessions, a Discussion and Q&A session was held, featuring Mr. Arif Raihan and Mr. Dhruvi Sundar Das, Lecturers in Prosthetics and Orthotics, as moderators. The participants actively engaged with the speakers, seeking further clarification and gaining deeper insights into the subject matter.



Scientific session/Workshop/Demonstration Day 2

The second day of the program began with Dr. Rahul Dokania as the first speaker. He provided an overview of Myo-Electric Prosthesis principles and control, followed by a live demonstration of Myo-Electric Prosthesis operations. The participants also learned about the cast-taking procedure for a suitable socket and the subsequent steps involved in socket fabrication and fitting.



Mr. Tanmaya Pany then took the stage, discussing Prehension and restoring hand function for Myoelectric Prosthesis users. His session emphasized the importance of restoring hand function to enhance the quality of life for individuals using myoelectric prostheses.



Mr. Abhishek Tripathi conducted the third session, focusing on Outcome Measures in Upper Extremity Prosthesis. He highlighted the significance of objective assessment tools to measure the effectiveness and functionality of upper extremity prosthetics, ensuring better outcomes for patients.



DAY-2 Q & A SESSION

The day concluded with a discussion and Q&A session, moderated by Dr. Prakash Sahoo and Dr. Saiprabha Mishra, Lecturers in Prosthetics and Orthotics. This session allowed participants to interact with the speakers, further enriching their understanding of the topics discussed.



Valedictory and Conclusion

The event's valedictory ceremony was conducted to mark the successful conclusion of the program. Certificates were distributed to all participants, acknowledging their active participation and dedication to the field of Prosthetics and Orthotics.

Hasan Md Arif Raihan, the Program Coordinator, expressed his heartfelt gratitude to all the attendees, speakers, students and organizers for making the event a grand success.

The program provided a significant platform for knowledge exchange, professional development, and networking, contributing to the advancement of Upper Extremity Prosthesis and the overall field of Prosthetics and Orthotics.

