## **ORIGINAL RESEARCH PAPER**



**POST-POLIO SYNDROME – A REHABILITATION** 

# **Medical Science**

KEY WORDS: Post-polio, Residual, Assistive device, orthosis, mobility aid.

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### INTRODUCTION

Post-polio syndrome (PPS) is a condition that affects post-polio residual paralysis (PPRP) for long years after recovery from initial acute attacks of the Poliomyelitis Virus. Post- polio Syndrome is mainly characterised by new weakness in muscles that were previously affected by the polio infection and in muscles that seems less affected.

CHALLENGE

In Post-polio Syndrome there is death of the motor neuron due to aging and burn out of motor unit from increased metabolic demand.

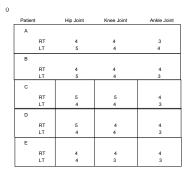
Clinically new symptoms presentations are such as-

-Weakness -Fatique -Myalgia -Arthralgia -Atrophy -Cold intolerance

#### MATERIAL AND METHODS

Five Post-polio residual Paralysis patient that were affected in both lower limbs has been recorded motor power of muscles through his discharge card.

Table -1 Power around joint in PPRP Patient recorded by discharge card



#### **OBSERVATION**

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After about a long time when Post-polio Syndrome has been developed motor power of both lower limbs has been examined.

#### Table-2 Motor power around joint in Post-polio Syndrome, patient examined as-

IIIIÚ Patient	Hip Joint	Knee-Joint	Ankle -Joint
A			
RT	3	2	1
LT	3	3	2
В			
RT	3	3	1
LT	3	2	2
С			
RT	4	3	2
LT	3	2	2
D			
RT	2	2	1
LT	4	3	2
E			
RT	3	2	2
LT	2	2	1

#### DISCUSSION

Post-polio Syndrome patients has been given assistive devices e.g.orthosis, energy conservation through mobility acids, psychological counselling and avoid fatigue.

#### Table -3 Assistive device – Type of orthosis

UiiiiMotor power around joint	Type of Orthosis
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Hip	Knee	Ankle	
Weak	Weak	Weak	H.K.A.F.O.
Strong	Weak	Weak	K.A.F.O.
Strong	Strong	Weak	A.F.O.

H.K.A.F.O. (Hip, Knee, Ankle, Foot, Orthosis) K.A.F.O. (Knee, Ankle, Foot, Orthosis) A.F.O. (Ankle, Foot, Orthosis)

#### CONCLUSION

In Post-polio Syndrome no intervention has been found to stop deterioration of surviving neurons. But physicians recommended that Polio survivors should get the proper amount of sleep, maintain a well -balanced diet , avoid unhealthy habits such as smoking and over eating and follow an regular exercise programme.

Proper life style changes, the use of assistive device and taking certain anti-inflammatory medications may help in some of the symptoms of Post-polio Syndrome.

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