



ORIGINAL RESEARCH PAPER

Medical Science

POST-POLIO SYNDROME –A REHABILITATION CHALLENGE

**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.

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
- Fatigue
- 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**

Patient	Hip Joint	Knee Joint	Ankle Joint
A	RT	4	3
	LT	5	4
B	RT	4	4
	LT	5	3
C	RT	5	4
	LT	4	3
D	RT	5	4
	LT	4	3
E	RT	4	4
	LT	4	3

**OBSERVATION**

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-**

Patient	Hip Joint	Knee-Joint	Ankle -Joint
A	RT	3	1
	LT	3	2
B	RT	3	1
	LT	3	2
C	RT	4	2
	LT	3	2
D	RT	2	1
	LT	4	2
E	RT	3	2
	LT	2	1

**DISCUSSION**

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

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

Motor power around joint			Type of Orthosis
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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