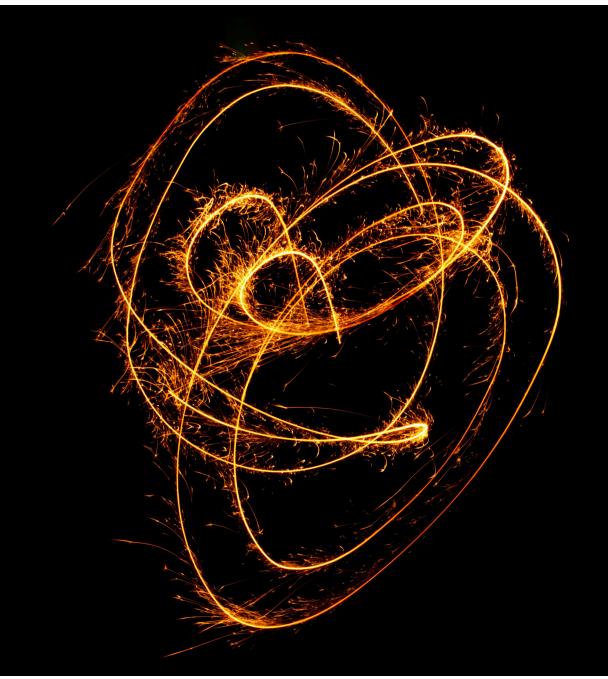


TABLE OF CONTENTS

FOREWORD	2
INTRODUCTION	з
STRENGTH	4
CONDITIONING	6
MOBILITY	7
A FULL WEEK OF TRAINING	8
DISCLAIMER	10



FOREWORD

The Protected Player has been an idea in my mind for a long time. The idea of keeping athletes injury free and thereby protected is something all us strength coaches dream about. However, this is not the case at all. Injuries sometimes come from the most unexpected places. A teammate of mine was going to collect a shuttle on the ground when a plank broke where he had placed his foot. The result? A few torn ligaments in his foot. This was one of the weirdest, most unexpected and unjust injuries I have ever seen or heard about. This is not something we can control. What we can control is the load the players are put under during the week, month and season. Overuse injuries can be reduced and controlled to a point, but we need to be close to the limit in order to not miss out on important training sessions.

The Protected Player is my way of giving some good foundational tips and tricks in order to reduce the risk of injuries. It does not protect you from everything, but it's a good start for doing some evidence based exercises for being protected. It will also make you a bit stronger and help with the athletic basics.



INTRODUCTION

As written in the foreword the aim of The Protected Player is to prepare and target specific areas which can help athletes staying injury free. However this first and free version of The Protected Player only focuses on strength training. In the future specific mobility and conditioning aspects will be added as well.

There is a clear progression through the whole program as you will see below. The Sets x Reps column needs to be adjusted for everyone. Tibialis raises are usually no problem, but when it comes to side planks and Nordic Hamstring Curls you need to scale it to your ability. If you are used to the exercises you can do more than what is suggested in the program, but make sure the technique is good. You can also add exercises that you like.



STRENGTH

My recommendation is to do it 3 times per week if you don't do any other training besides badminton. If you do strength training and/or running besides playing you could decrease the amount of sets and do 1 of each exercise. However these exercises all have a purpose and so do the sets and reps for each exercise. But if you have a balanced program already, then just add in a few of these exercises when you do your training.

You don't need to do every exercise every session, you could split it up and do a few after your badminton practices and some at home. Make sure you get at least 2 days of full recovery during the week. Recovery is not something to underestimate.

Week 1 and 2

Exercise	Sets X Reps
Tibialis Raises	2 x 15
Pallof Press	2 x 30 sec hold
Calf raise against wall	2 x 15
Side plank	2 x 15-30 sec
Bird Dog	2 x 30 sec hold
Bulgarian split squat	2 x 15
Nordic Hamstring	3 x 5-7
External rotation	2 x 20
Pogo Jumps (3 variations)	1-2 x 15
Box jump OR squat jump	3 x 5
Standing Broad Jumps	3 x 5

Week 3 and 4

Exercise	Sets X Reps
Tibialis Raises	2 x 25
Pallof Press	2 x 40 sec hold
Calf raise against wall	2 x 25
Side plank	2 x 30-45
Deadbugs	2 x 12
Bulgarian split squats	1 x 20
Nordic Hamstring	3 x 5-7
External rotation	1 x 20
Pogo Jumps (3 variations)	1 x 15
Box jump OR squat jump	3 x 6
Standing Broad Jumps	3 x 6
Tuck Jump	2 x 4

Week 5 and 6

Exercise	Sets X Reps
Tibialis Raises	1 x 25
Pallof Press with rotation	2 x 15
Calf raise against wall	1 x 25
Side plank	2 x 45-60 sec
Deadbugs	2 x 20
SL glute bridge	2 x 12
Nordic Hamstring	2 x 7-10
External rotation	1 x 20
10-15 meter sprint	2 sets with lots of rest
SL Pogo Jumps (3 variations)	1 x 15
Box jump OR squat jump	3 x 6
Standing Broad Jumps	3 x 6
Tuck Jump	2 x 4

Week 7 and 8

Exercise	Sets X Reps
Tibialis Raises	1 x 25
Pallof Press with rotation	2 x 15
Calf raise against wall	1 x 25
Side plank static + rotation	2 x 30 sec + 5 rotations
Deadbugs	2 x 20
SL glute bridge	2 x 15-20
Nordic Hamstring	2 x 7-10
External rotation	1 x 20
10-15 meter sprint	2 sets
SL Pogo Jumps (3 variations)	1 x 15
Tuck Jumps	2 x 6
SL hop	2 x 4
SL lateral hop	2 x 4
SL vertical jump	2 x 4

CONDITIONING

A training program for sports is not complete without taking conditioning and mobility/flexibility into account. This section will be about the first.

Since badminton is demanding on all the body's energy systems, we need to prepare accordingly. If you were to be really explosive and strong, but lack the aerobic capacity to move during the full extent of a match you would be limited to that aspect. Something else that is often overlooked is that when we are tired, we often do mistakes both tactically and technically. This could potentially lead to injuries. The research is not conclusive about that statement, but from my personal experience as a coach, trainer and player/athlete I have found that high intensity while fatigued and stressed makes us more prone to certain injuries. What I have found is that we change our technique in our movement around the court when we are fatigued. For instance, I once injured my knee during a session where I was a bit fatigued, but mainly playing faster than my footwork technique would allow. It was a multi shuttle session and I was moving fast from a smash from my backhand side and the next shuttle came back to the same corner. When I put my foot down to change direction (I was moving forward) I had my knee extended instead of slightly bent, which meant I put full force on my extended knee. Imagine doing a heavy leg press and at the top having straight legs until your knee starts bending the wrong way. This is, as you might have guessed already, not ideal. It took a long time to recover from that injury. I have seen many injuries happen during later stages of tournaments and matches. Therefore I will write this section about conditioning for improving performance, but with the goal of staying free of injuries as the one I just mentioned.

The following suggestion of conditioning for badminton players is not proven to prevent injuries, but it will make you more adapted to the demands of badminton. Depending on your fitness level and time of season I will make a few different suggestions where you can pick your favorite and/or switch between them during different periods. For instance you might do version 1 for 6 weeks and then switch to version 2 for the coming 6 weeks etc.

Version 1 - Base			
Day 1			
Type of exercise	Time/duration	Heart rate/intensity	Rest
Intervals (running)	6 x 400 meter	Very hard	1,5 minutes
Day 2			
Long distance running	30-60 minutes	60-70 %	Maybe walking

Intervals on court are meant to be done after a badminton session. If you are unable to do it after for whatever reason (you might be on vacation, the courts are booked etc), do some sort of badminton specific movements for the same duration or some general change of direction drills. IF not even that is possible, do some really hard sprints with the same rests and sets.

Version 2 - Different base			
Day 1			
Type of exercise	Time/duration	Heart rate/intensity	Rest
Intervals (running)	6 x 400 meter	Very hard	1,5 minutes
Day 2			
Intervals on court	10 x 15 sec	Hard	10-30 sec between rounds
Day 3			
Low impact endurance (bike)	30-60 minutes	60-70 %	N/A

Version 3 - more specific			
Day 1			
Type of exercise	Time/duration	Heart rate/intensity	Rest
Intervals (running)	14 x 70/20	Hard ≈ 85 %	2 mins after 7 intervals
Day 2			
Intervals on court	10 x 15 sec	Very hard	10-30 sec between rounds
Day 3			
Low impact endurance (bike)	10 x 90/30	70-80 %	Take 1-1,5 min rest after 5

Version 4 - even more specific			
Day 1			
Type of exercise	Time/duration	Heart rate/intensity	Rest
Intervals - change of direction	14 x 20 sec	Hard	20-40 sec
Day 2			
Intervals on court	10 x 15 sec	Very hard	10-30 sec between rounds
Day 3			
Low impact intervals (LII) (bike)	10 x 60/60	Hard ≈ 85 %	

The more intense intervals there are in the program, the more specific it is. To make it even more specific we have change of direction drills included. These could be moving laterally (to shuffle) over the court as fast as possible or doing it like a short beep test on the court. It could be whatever you feel like as long as there are changes in direction involved, preferably over a small area.

MOBILITY

This is often very overlooked when it comes to sports or training in general. And when someone does mobility or flexibility they do some static stretches and then complain that they don't work because it doesn't translate that well over to their sport. Note that mobility and

flexibility are not the same thing, but for making it easy to understand we will call this secion mobility. We could also do certain exercises in the gym which work as mobility work. What? Is that true? Yes, it is very true. Doing RDLs or straight legged deadlifts, deep squats and overhead squats is great for strength and mobility. (There are more exercises that work mobility, this was just a few examples). However these require great technique, but if you can do these at full range of motion you are getting strong and mobile.

If you have injuries or are hypermobile maybe this part is not for you, but some of these will probably be beneficial. 90/90 lift offs are good for almost anyone and can be seen as mobility and strength. The exercise has many names such as 90:90 internal hip rotation, 90:90 heel lift etc. I will however call it 90/90 lift offs. Be aware that you need some sort of movement screening to find the exercises that YOU need. These are some suggestions and can help with rotation and certain areas of mobility.

Exercise	Sets/reps/time
Thread the needle	2 x 4
Squat rotation	2 x 8
90/90 lift offs	2 x 8
Pigeon pose or glute stretch	2 x 30 sec

A FULL WEEK OF TRAINING

The last thing to discuss is how to actually structure a week of training based on the three pillars of this program: strength, conditioning and mobility. The most difficult part in writing a general program is to make adjustments based on the individual (which is impossible). But let's make this as easy as we can and then you will have to adjust according to your fitness levels and your circumstances. Especially since different parts of the season have more tournaments than others

We will first do it for a player who has 3 badminton practices per week and wants to train 5 times per week. We choose to do version 4 of conditioning.

Weekly schedule	Sports Practice	Parts of protected player
Monday	Badminton	Mobility, intervals CoD
Tuesday		Strength
Wednesday	Badminton	Mobility
Thursday	Badminton	Mobility, intervals on court
Friday		
Saturday		Mobility, LII, strength
Sunday		

Let's take the same number of training days, but only 2 badminton sessions per week.

Weekly schedule	Sports Practice	Parts of protected player
Monday	Badminton	Mobility, intervals CoD
Tuesday		
Wednesday	Badminton	Mobility, intervals on court
Thursday		Mobility, Strength
Friday		LII, Mobility
Saturday		Mobility, strength
Sunday		

It looks very similar but we can do the conditioning on another day (friday) and therefore focus more on strength on saturday. It is however possible for this player to add some more aerobic work on the saturday if there is time. It could for instance be some sort of mixed conditioning with 10 easy minutes on the bike followed by the same on an elliptical and lastly on the treadmill. This means 30 minutes of varying aerobic work during the week. If it's only two sessions per week you could (and maybe need to) add in some more running, biking etc. You could also add in some of the core exercises after a badminton session to add more weekly volume as well.



DISCLAIMER

Please consult your doctor, coach, physiotherapist or other experts before engaging in this program. Make sure that you are in perfect health before trying this exercise routine. If you engage in this training program you do it at your own risk. Should you notice any pains, swelling, bruising or other indications of injury contact medical personnel immediately.

