



Partner of
swiss aquatics 
swimming medical team

Coaches Clinic 2024

SCREENINGS, PAIN SCALE, RECOMMENDATIONS

Partnership SAS & 3PO

Partner of

swiss aquatics 

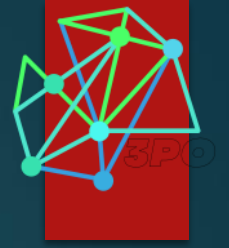
swimming medical team



Started in
September
2021

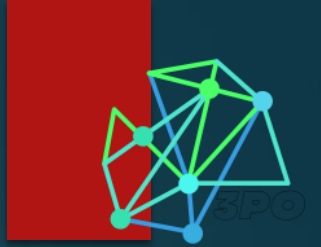


Due to talks
about the
physiotherapy
work in high
performance



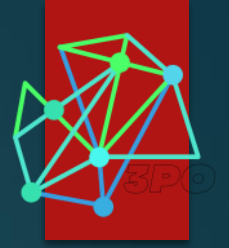
Partnership –SAS & 3PO

- ▶ 1- The deployment of physiotherapist with the national swimming teams
- ▶ 2 - Screenings with the national team members
- ▶ 3– Concept Work for the national swimming teams
 - ▶ - Injury Profiling
 - ▶ - Illness and Injury Surveillance Program



1 - Deployments National Teams

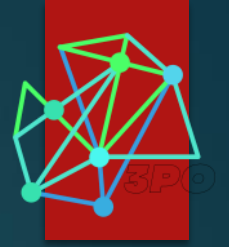
- ▶ Following the work that was done previously before the creation of 3PO
- ▶ Ensuring the highest quality service for national team members
- ▶ Creation of guidelines for the national teams
 - ▶ Warm-ups
 - ▶ Recovery Strategies
 - ▶ Prevention/Prehab



2-Screenings

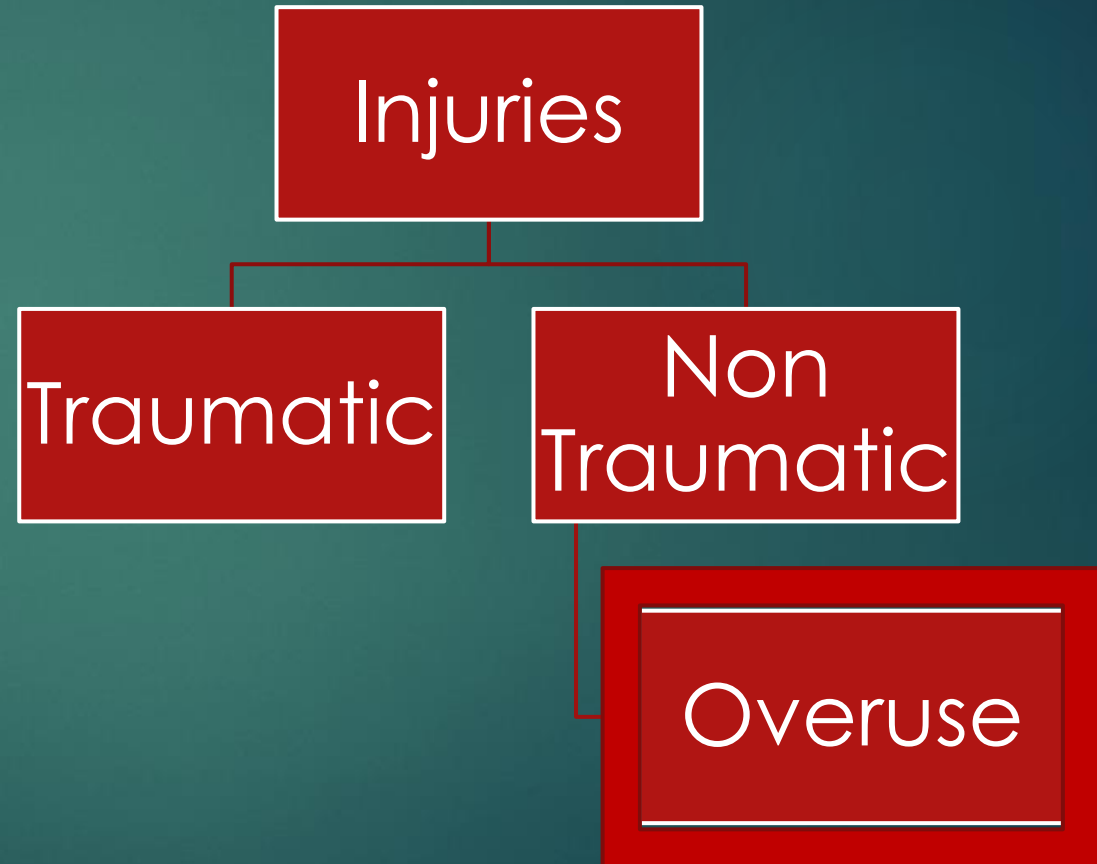
- ▶ What are they for?
 - To try and Prevent Overuse Injuries
- ▶ Why are they important?
 - ▶ Detect asymmetries
 - ▶ Congenital problems
 - ▶ Detect potential problems in administering load
- ▶ Previous experiences with Screening
 - ▶ Low understanding of what is done
 - ▶ Low applicability in the training process

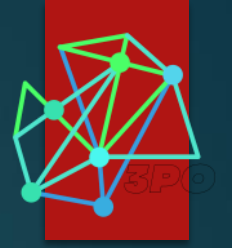
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2-Screenings

- ▶ What are they based on?
Scientific Literature



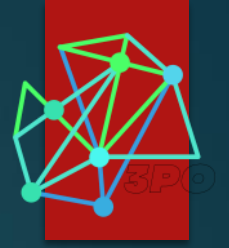


2-Screenings

Scientific Literature

- ▶ Case studies
- ▶ Risk Factors and Epideomology
- ▶ RCT'S with prevention exercises
- ▶ Sistematic Reviews

???



2- Screenings

► Epidemiology Injuries

Swimming
Injuries

Shoulder 40-91%

Supraespinatus

Infraespinatus

Long Head Biceps

Bursitis

Knee 33%

Medial Collateral Ligament

Patellar Femoral Pain (Chondromalacia)

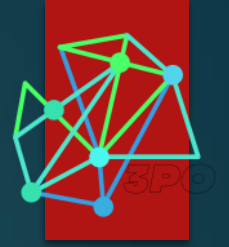
Spine 50%

Mechanical Low Back Pain

Disc Problems

Hip/Groin 11%

Adductors Tendinopathy



2- Screenings

► Epimediology Injuries

Shoulder
40-91%

Supraespinatus

Freestyle, Backstroke, Butterfly

Infraespinatus

Freestyle, Backstroke, Butterfly

Long Head Biceps

Freestyle, Backstroke, Butterfly

Bursitis

Freestyle, Backstroke, Butterfly

Knee 33%

Medial Collateral Ligament

Breastroke

Patelar Femular Pain (Chondromalacia)

Breastroke

Spine
50%

Mechanical Low Back Pain

Butterfly, Breastroke

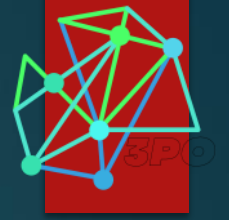
Disc Problems

Butterfly, Breastroke

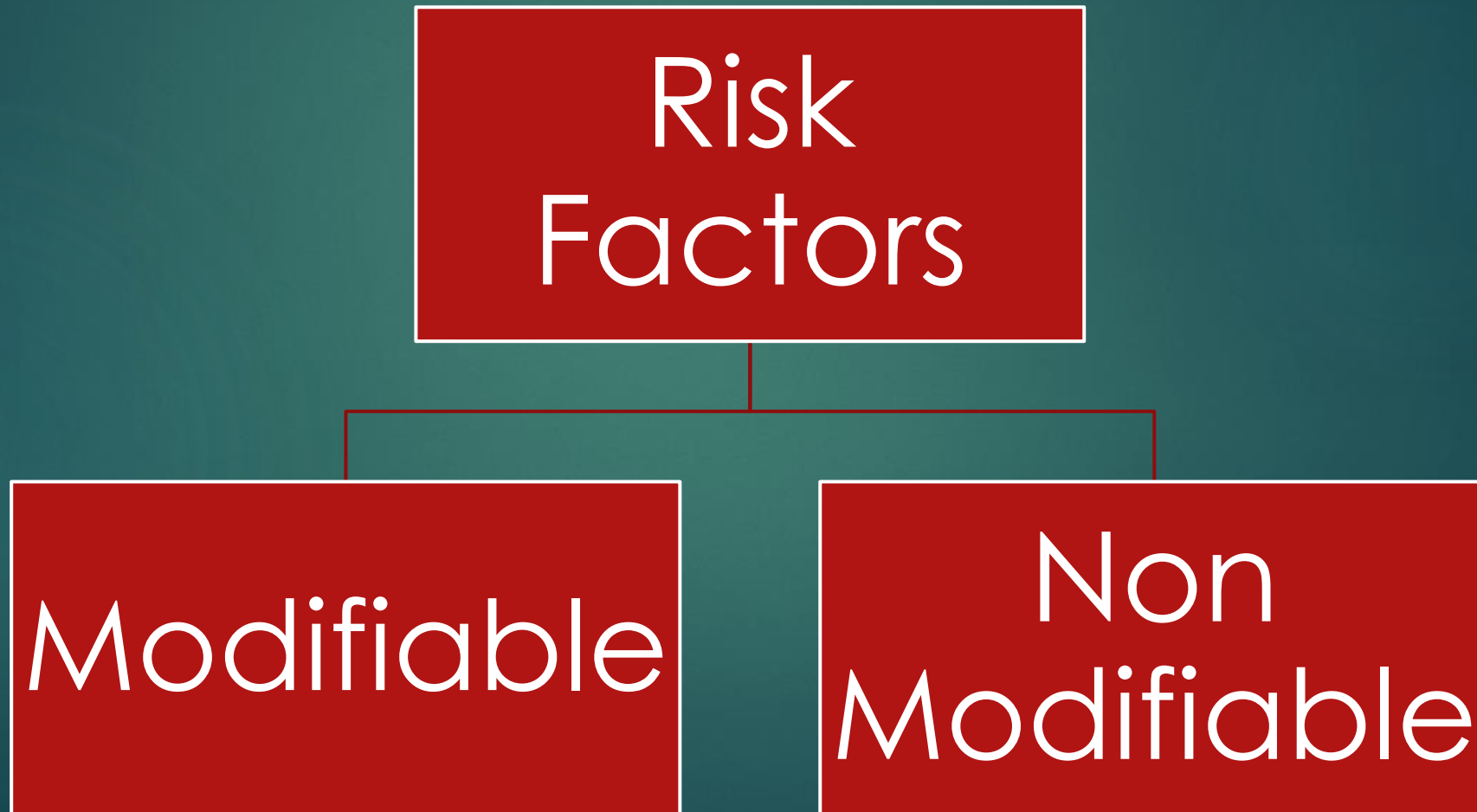
Hip/Groin
11%

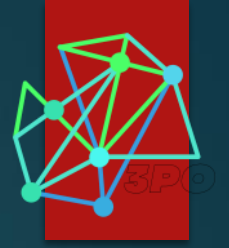
Adductors Tendinopathy

Butterfly, Breastroke



2-Screenings





2-Screenings

Risk Factors

▶ Technical

- ▶ Hand Entry too lateral at Freestyle
- ▶ Pull too wide
- ▶ Not enough rotation freestyle

▶ Range

- ▶ Deficit on Internal Rotation of the shoulder
- ▶ Hypermobility

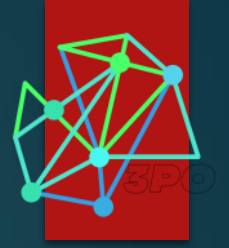
Risk Factors

Volume

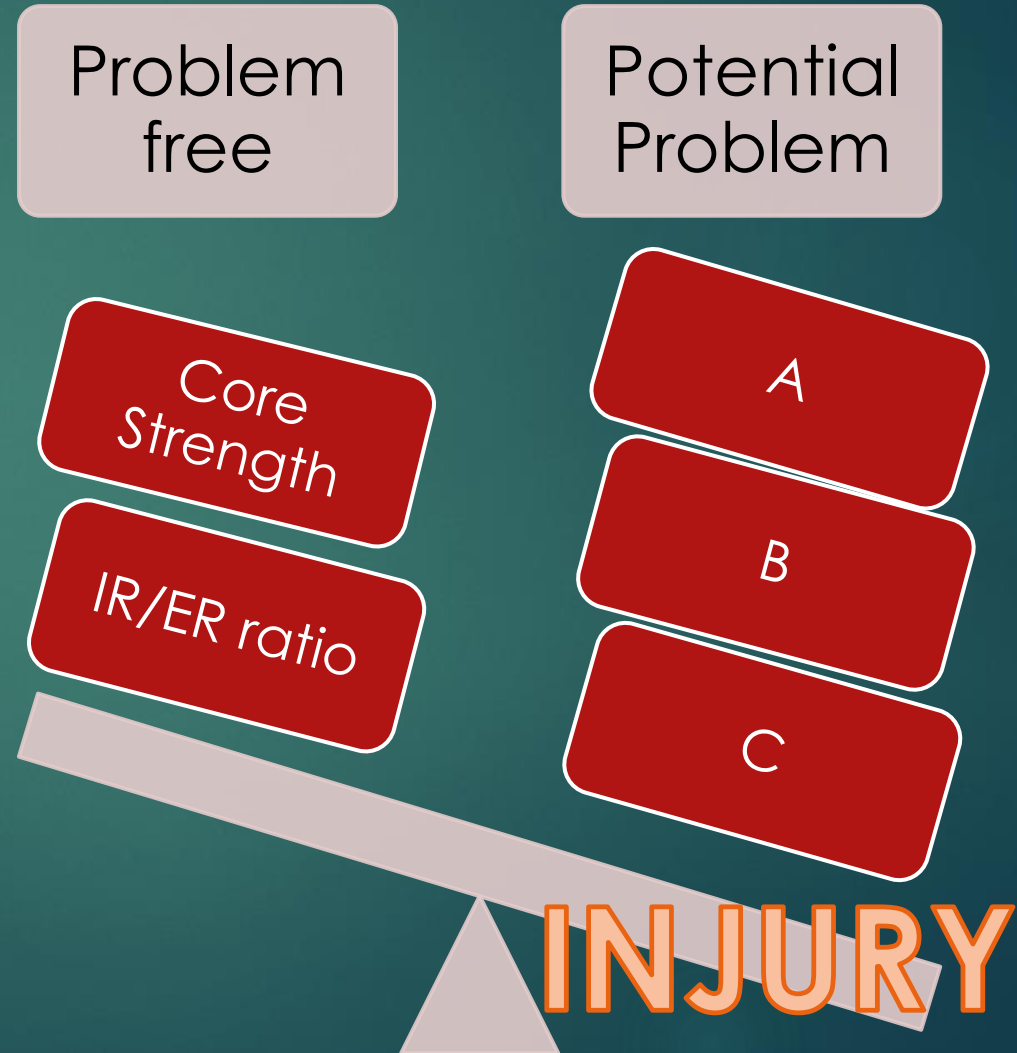
- Training Load and Recovery
- Years of competition
- Level of Competition

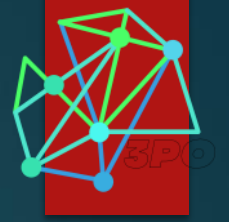
Others

- Changing of coach



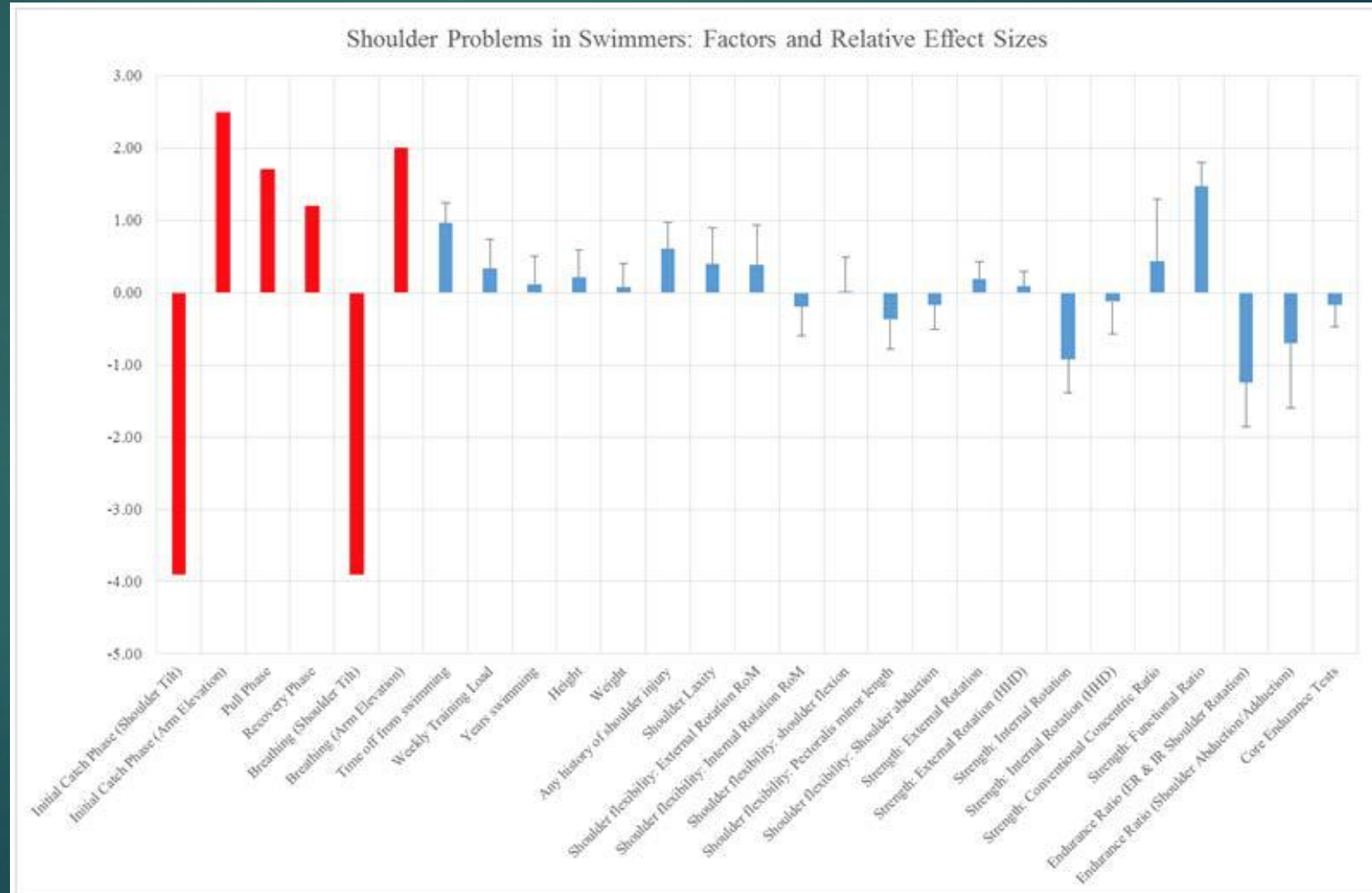
2-Screenings





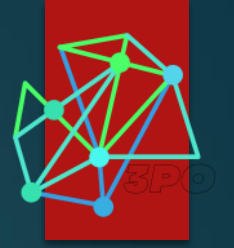
2-Screenings

Scientific Literature
Lee et al 2016



swiss aquatics 

swimming medical team



2-Screenings

3 Screening moments during the season. September, January, April

- ▶ Identification
- ▶ Assessment
- ▶ PSFS
- ▶ KJOC

swiss aquatics 

swimming medical team

2-Screenings

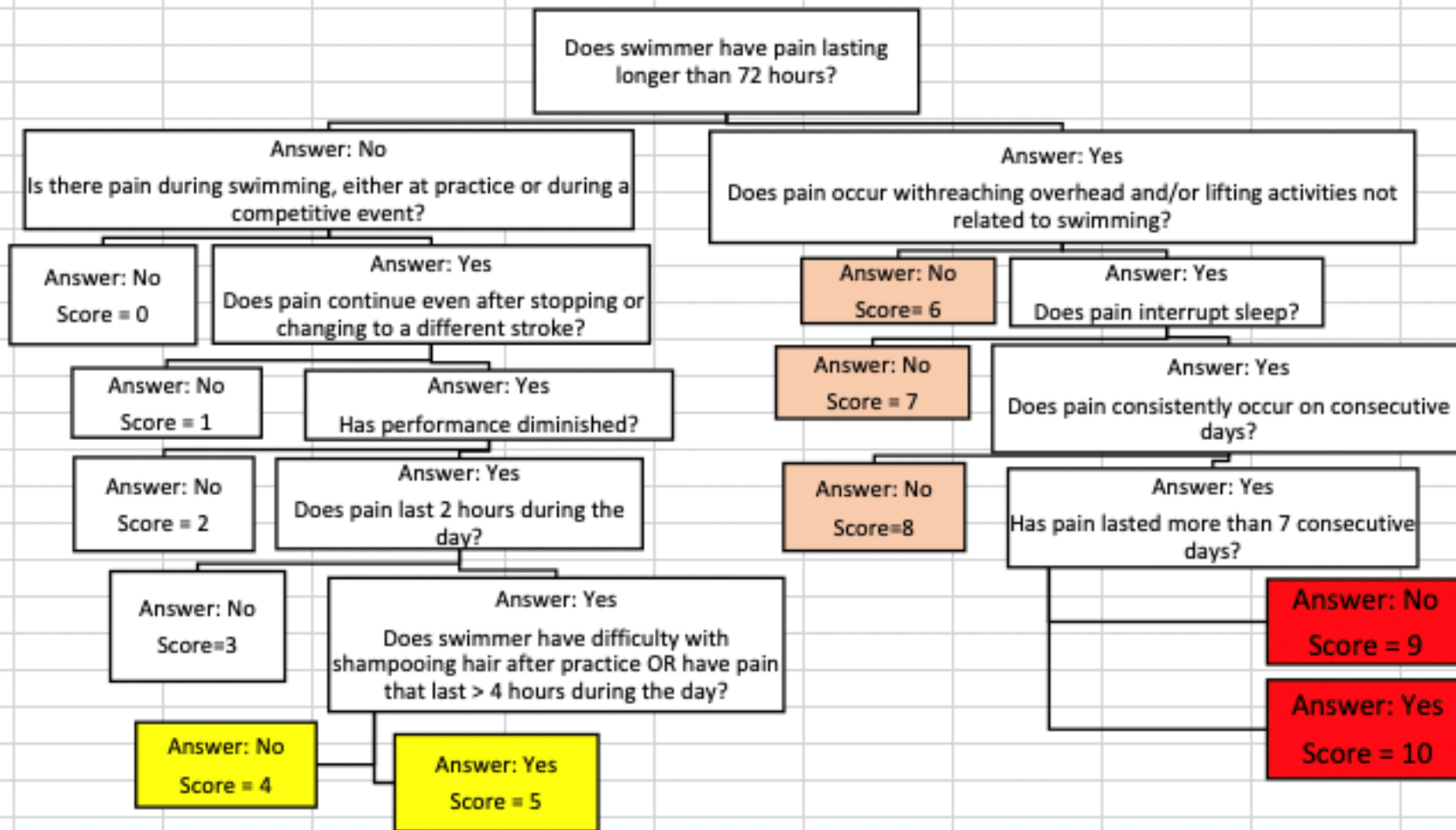
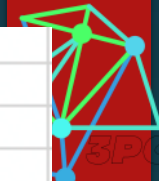
► Identification

Date of test	
Name (First Name, Last Name)	
Gender (M/F)	
Age	
Height (meters, centimeters)	
Weight (kilograms, Grams)	
BMI	
How many years of Competition	
Did you ever Stopped swimming competetively?(Y=1/N=0)	
Best Stroke (Fr, Ba, Br, Bu, Me)	
Best Event(50/100/200...)	
Freestyle Breathing Side (R/L/Both)	While Recovering
	While Warm-up
	While Fatigued
	During Race pace
	During Competition
Dominant Arm (R/L)	
Coach Name	
How many years with Coach	
Training volume per session Average (meters)	
How many sessions per week (water+gym, example 8W+2G= 10sessions)	
Total Hours of Training per week	
Previous Injury (Shoulder, Knee,Spine, Hip, Elbow,Wrist, Ankle) (R/L/Both) Where?	
Did You Stop swimming because of the injuries? (No=0) (1day+)	
Had Treatment for those injuries? (Y=1/N=0)	
Do you have Regular Tretament? (Y=1/N=0)	
Frequency (1xW,2xW, 2xM, 1x3w, 1xM)	
Name of Therapist	
Contact	
Pre competition (what happens often),	Anything Hurts (Y=1, N=0)?
	When does it hurt?

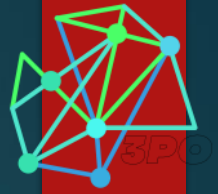
Assesement

Shoulder Right	ER ROM Active Supine	
	IR ROM Active Supine	
	Flexion ROM Active Supine	
	Aprehension test Supine	
	Pec Minor Index Supine (PMI)	
	Sleeper's test ROM Lateral	
	ER RES ISO Sitting	
	IR RES ISSO Sitting	
	Load Test 1,2	
	Hawkins Kennedy	
	Neer's test	
Speed's Test		
Shoulder Left	ER ROM Active Supine	
	IR ROM Active Supine	
	Flexion ROM Active Supine	
	Aprehension test Supine	
	Pec Minor Index Supine (PMI)	
	Sleeper's test ROM Lateral	
	ER RES ISO Sitting	
	IR RES ISSO Sitting	
	Load Test 1,2	
	Hawkins Kennedy	
	Neer's test	
Speed's Test		
Shoulder Blade Right	Active Horizontal Abd Active prone ROM	
	Standing arm at Side (thumbs forward)	
	Standing arms at Iliac Crest (thumbs back)	
	Standing Abd 90 degrees (thumbs up)	
Shoulder Blade Left	Active Horizontal Abd Active prone ROM	
	Standing arm at Side (thumbs forward)	
	Standing arms at Iliac Crest (thumbs back)	
	Standing Abd 90 degrees (thumbs up)	
Spine Right	St Flx Test	
	Lumbar Lock Rotation test ROM	
	Slump	
	Patrick Faber	
	KEMPS test	
Spine Left	St Flx Test	
	Lumbar Lock Rotation test ROM	
	Slump	
	Patrick Faber	
	KEMPS test	

Hip Right	IR ROM Active Supine		
	ER ROM Active Supine		
	IR ROM Active Prone		
	ER ROM Active Prone		
	FADDIR test		
Ober's test			
Hip Left	IR ROM Active Supine		
	ER ROM Active Supine		
	IR ROM Active Prone		
	ER ROM Active Prone		
	FADDIR test		
Ober's test			
Knee Right	Squat Overhead - Knees inwards		
	Squat Overhead - Pronation feet		
	Squat Overhead - Curved Back		
	Lunge Straight Line - Knees inwards		
	Lunge Straight Line - Pronation feet		
	Lunge Straight Line - Curved Back		
	SLR		
	MCL Stress Test		
	LCL Stress Test		
	Macmurray's		
	Thessely's		
	Knee Left	Squat Overhead - Knees inwards	
		Squat Overhead - Pronation feet	
		Squat Overhead - Curved Back	
Lunge Straight Line - Knees inwards			
Lunge Straight Line - Pronation feet			
Lunge Straight Line - Curved Back			
SLR			
MCL Stress Test			
LCL Stress Test			
Macmurray's			
Thessely's			
Ankle Right		Knee to wall test	
Ankle Left		Knee to wall test	
Beighton Scale		Palms on Floor without knee bent	
	Hyper-extension elbows 10 degrees R		
	Hyper-extension Knees 10 degrees R		
	5th Finger dorsiflexion more than 90 degrees R		
	Thumb Touching the anterior forearm R		
	Hyper-extension elbows 10 degrees L		
	Hyper-extension Knees 10 degrees L		
5th Finger dorsiflexion more than 90 degrees L			
Thumb Touching the anterior forearm L			



Your Score Today



2-Screenings

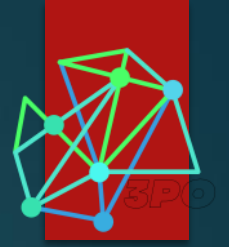
Identification Questionnaire

Identification									Free Breath Side					Coach		Volume Load			Previous Injury			Regular Treatment				Pre comp			
Gender	Age	Height	Weight	BMI	Y Comp	Comp Stop	Stroke	Events	Recovery	Warm-up	Fatigue	Race pace	Comp	Dominant Arm	Coach	Y Coach	Per Session	N Sessions	Tot Hours	Where	N Stop days	Treatment	Y/N	Frequency	Name	Contact	What	When	
F	18	1.8	72	22.2222	10		Free	400	Both	Both	Both	Both	Both	R	Pablo kutscher	1	4500	10	24	Shoulder R	6+	1	1	2xW	Marcel enzler	Physio balgrist	Shoulder R	Most of the e	
F	25	1.64	55	20.44914	17	1	Backstroke	200	L	L	L	L	L	R	Nicolas Horter	3	7500	10	26	Knee	6+	Y	N	None	N	N	N	N	
F	25	1.64	55	20.44914	17	1	Backstroke	200	L	L	L	L	L	R	Nicolas Horter	3	7500	10	26	Knee	6+	N	N	N	N	N	N	N	N
M	19	1.88	85	24.04934	10	0	Free	200400	R	R	R	R	R	R	Pablo Kutscher	3	6000	13	24	Shoulder L	0	Y	1	1xW	Simone Chatelain	41764173204	None	N	
M	27	1.91	85	23.2998	13	1	Medley	200	L	L	L	L	L	L	Phillipe Lucas		7500	12	30	Shoulder Both	0	1	1	1xW	Casanova		Low Back	Low back :P	
F	18	1.8	74		11	0	Free	800	R	R	Both	R	Both	L	Pablo Kutscher	3	6000	10	22	Ankle L	0	1	1	1xW	Daniel Beck- Schlanke	se Zurich Löwen	Shoulder Both	Swimming longer dista	
M	18	1.8	77	23.76543	11	0	Medley	200400	Both	Both	Both	Both	Both		Pablo Kutscher	2	5500	13	23	Shoulder Both	0	1	0	0	None			None	N
F	17	2	65	22.22906	12	0	Ba	50100	Both	Both	Both	Both	Both	R	Clément Bailly	1	5500	10	18	None			0				None	N	
F	26	1.8	68	20.98765	15	0	Free, Ba	100	both	both	both	L	L	R	Clement bailly	1	5000	11	25	None			0	1	1*W	pascal goll	041 79 773 24	None	N
M	23	1.65	52	19.10009	13	0	Breaststroke	200	Both	Both	R	R	R	R	Andrea Grassini & Dirk Reinicke	7	6000	11	24	Shoulder Both	0	1	1	1xW	Marcel Enzler	el.Enzler@balgr	None	N	
M	18	1.97	83	21.38679	7	0	Breaststroke	100	L	Both	L	L	L	R	Dirk Reinicke	1	6000	11	24	None	0	0	0	0	None			None	N
M	21	1.8	73	22.53086	12	0	Free, Ba	200	R	R	R	R	R	R	Clement Bailly	2		11	25	Knee	2	Y	Y	1xW	Thomas Meister	787598494	None	N	
M	18	1.84	77	22.7434	10	0	backstroke	50100	both	both	L	L	L	R	Fausto Mauri	6	5500	13	20	Ankle L	0	0	0	0	None			None	N
M	18	1.8	72	22.2222	12	0	Free	100	Both	Both	L	L	L	R	Pablo Kutscher	1	5000	11	20	None							None	N	
F	17	1.82	75	22.6422	12	0	Fr, Ba, Bu	50-200	Both	Both	Both	Both	Both	r	Nicolas Bailly	4	4500	10	15	Knee L		14	1	1	2xM	Timothee Bernard	078 873 28 8	Shoulder B	N
M	19	1.8	65	20.06173	13	0	Medley	400	Both	R	R	R	R	R	Gabriel Schneider	9	6500	12	23	Elbow	21	Y	Y	2xM	Medbase		N	N	
F	18	1.88	76	21.50294	8	0	Fr, Bu	50,100	Both	Both	Both	R	R	L	Xavier Fleury	3	5000	10	19	Shoulder Both	0	1	1	1xW	Fabienne Kernen	lo@rennbahn	Low Back	After 2 days of comp	
	20.29	1.80	71.12	21.85	11.94											3.13	5843.75	11.20	22.82										
	3.46	0.09	10.06	1.38	2.70											2.36	995.30	1.15	3.56										
M	17	1.88	80	22.63468	10	0	Backstroke	200	R	R	R	R	R	R	Dirk Thöking	3	6500	15	25	Low Back	0	1	0	0	None		Low Back	After some days of Comp	
F	14	1.69	56	19.60716	7	0	Bu, Br	200	Both	Both	Both	R	R	R	Thomas Rother	3		10	23	None	0	0	0	0	None		None	N	
M	15	1.77	73	23.30109	6	0	Backstroke	200	R	R	R	Both	R	R	Frank Trettin	2	6000	13	22	None	0	0	0	0	None		None	N	
F	15	1.61	51	19.67517	5	0	Medley	200400	Both	Both	Both	Both	Both	Both	Sandra Liesch	4				Knee	6+	Y	N	N	N	Althius Reinfelden	N	N	
M	17	1.82	69	20.83082	8	0	Free	100	Both	Both	Both	R	R	R	Daniel Santos	3	5500	11	20	Shoulder R	14	1	0	0	1x3W	Christine Dohogne	41764149324	None	N
F	14	1.67	63	22.58955	7	0	Breaststroke	50	Both	Both	R	Both	Both	L	Simo Meloni and Andrea Me	1	6500	9	16	Knee Both	0	0	0	0	None		None	N	
M	16	1.73	60	20.04745	8	0	Fr, Ba	200400	R	R	R	R	R	R	Boris Baccala	2	5500	10	16	None	0	0	0	0	None		None	N	
F	16	1.72	69	23.32342	5	0	Free	800-1500	Both	Both	Both	Both	Both	R	Dirk Reinicke	1	6000	12	24	Low Back	7	1	0	0	None		None	N	
F	13	1.56	48	19.72387	7	0	Free	200	R	R	R	L	L	R	Christoph Schreiner	2	5000	16	22	Shoulder Both	0	1	0	0	None	MedBase Bern		None	N
M	17	1.75	66	21.55102	9	0	Butterfly	100200	Both	Both	Both	Both	Both	R	Stephane de Battisti	2	6000	12	21	Shoulder Both	0	1	0	0	None		None	N	
F	15	1.69	61	21.3578	5	0	Free, Bu	50	L	L	R	R	R	R	Xavier Fleury	1	4000	8		Knee	6+	Y	N	N	N	N	N	N	
M	14	1.65	53	19.4674	6	0	Butterfly	100	Both	Both	L	Both	Both	L	Paolo Fasani	1	5500	8	16	None	0	0	0	0	None		None	N	
M	14	1.6	46	17.96875	5	0	Free	800	R	R	R	R	R	L	Jürg Strasser	6	7000	8	14	Low Back	0	0	0	0	None		None	N	
M	17	1.96	75	19.52312	7	0	Butterfly	100	R	Both	Both	R	R	R	Dirk Reinicke	2	6000		25	Neck		1	N	N	N	N	N	N	
F	16	1.64	59	21.93635	7	0	Medley	200400	Both	Both	L	L	Both	R	Dirk Reinicke	1	6000	12	25	Shoulder Both	7	1	0	0	None		None	N	
F	13	1.65	58	21.30395	6	1	Medley	200400	R	R	R	R	R	L	Schreiner Christoph	1	5000	9	18	None			0	0	0	None		None	N



2-Screenings

- ▶ What to do with all the data?
- ▶ How does that brings us closer to finding injuries or preventing them?



3-Concept Work

- ▶ What injuries do we have?
- ▶ Can we prevent them?
- ▶ Can we predict them?
- ▶ Is taking data from screenings the answer?



- ▶ Register the problems when they occur

3-Concept Work

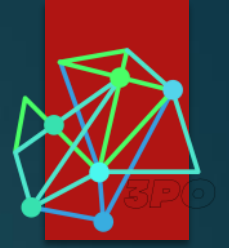


Box 3 Categories for affected system by illness^{14 19–21 34 36 37}

1. Upper respiratory tract (nose, sinuses, pharynx, larynx)
2. Lower respiratory tract (trachea bronchi, lungs)
3. Gastrointestinal
4. Cardiovascular
5. Urogenital/gynaecological
6. Metabolic/endocrinological
7. Allergic/immunological
8. Haematological
9. Dermatological
10. Musculoskeletal
11. Ophthalmological/otological
12. Dental
13. Neurological/central nervous system
14. Psychiatric/psychological
15. Other

Box 4 Categories for illness symptoms^{14 19–21 34 36 37}

1. Pain/ache/soreness
2. Fever/chills
3. Nausea, vomiting, diarrhoea
4. Cough, wheezing, dyspnoea
5. Shortness of breath
6. Irregular heartbeat/palpitation
7. Dehydration/excess sweating
8. Rash/itch/eczema
9. Nasal congestion/rhinorrhoea
10. Dizziness/vertigo
11. Fainting/syncope
12. Numbness/weakness/tingling
13. Fatigue/lack of energy/lethargy
14. Sleep disturbance
15. Psychological problems/anxiety/depression
16. Other

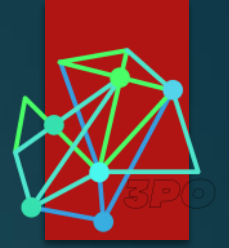


3-Concept Work

Our Concept:

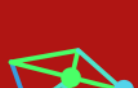
- ▶ Members of the Youth, Junior and Elite teams
- ▶ 3 Screenings: Beginning of the Macrocycles
- ▶ Injury and Injury and Illness Surveillance
- ▶ Cross Reference the data from Screenings and Injury and Surveillance APP
- ▶ Update Recommendations after every screening.

3-Concept Work



Swiss Aquatics Swimming Injury and Illness Surveillance APP

- ▶ Located on 3PO website <https://3pohealth.ch/swiss-swimming-injury/>
- ▶ Members need to register – Name, Email, Password
- ▶ Log in to enter the Swiss Aquatics Swimming page on 3PO
 - Videos on how to turn the website into an phone app: IOS, Android
 - Download Dryland Examples – Updates in the future
 - SSA IISApp form – Instructions in English, German and French



Download Swiss Aquatics Swimming Injury and Illness Surveillance Application

App IOS iPhone

App Android

Download Dryland Examples

Quarantine 2020

Budapeste 2021

Swiss Swimming Injury and Illness Surveillance

This is the Swiss Aquatics Swimming self report mask. This surveillance is a part of the Swiss Aquatics Swimming and 3PO partnership. The objective is to have more insight on injury and illness, of our National Team athletes, throughout the season. All data will be treated as medical records and stored under Swiss Data Privacy laws. This injury and illness surveillance system uses the "*Consensus statement on the methodology of injury and illness surveillance in FINA (aquatic sports), 2015*". This Statement can be found [here](#).

The Athletes of the **Youth, Junior and Elite** Swim teams, please download and read the following instructions

Instructions English

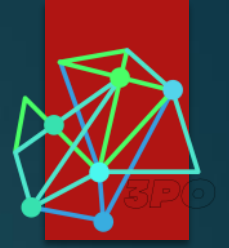
Instructions German

Instructions French

swiss aquatics 

swimming medical team

3-Concept Work



Swiss Aquatics Swimming Injury and Illness Surveillance APP

Form:

- ▶ First name, Last Name
- ▶ Email
- ▶ Location of Injury
- ▶ Type of injury
- ▶ System
- ▶ Symptoms
- ▶ Time loss
- ▶ Pain Scale
- ▶ Comment Box

Name *

First

Last

Email *

Box 1 - Location Of Injury *

Correspondent Number of Location of Injury according to FINA Consensus Statement

Box 2 - Type of Injury *

Correspondent Number of Type of Injury according to FINA Consensus Statement

Box 3 - System Affected *

Correspondent Number of System Affected according to FINA Consensus Statement

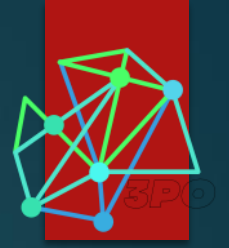
Box 4 - Symptoms *

Correspondent Number of the Symptoms according to FINA Consensus Statement

Time-Loss *

swiss aquatics +

swimming medical team



3-Concept Work

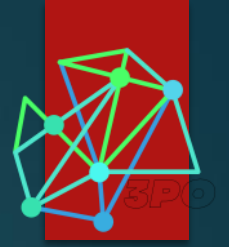
Swiss Aquatics Swimming Injury and Illness Surveillance APP

- ▶ Shoulder Pain 11
- ▶ Impingement 15
- ▶ MusculoEsqueletal 10
- ▶ Soreness/pain 1
- ▶ Pain Scale 4

First Name, Last Name 11, 15, 10, 1, 5 days of time loss, 4 pain

swiss aquatics 

swimming medical team



3- Concept Work

Scientific Literature

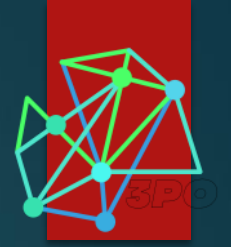
Prediction of Shoulder Pain in Youth Competitive Swimmers

The Development and Internal Validation of a Prognostic Prediction Model

Stef Feijen,^{*} MS, Thomas Struyf,^y MS, Kevin Kuppens,^{*} PhD, PT,
Angela Tate,^z PhD, PT, and Filip Struyf,^{*§} PhD, PT

Investigation performed at Department of Rehabilitation Sciences and Physiotherapy,
University of Antwerp, Antwerp, Belgium

3- Concept Work



Scientific Literature

- ▶ 2 seasons
- ▶ 201 swimmers
- ▶ Average age 13,9

At a Regional Level

1. Acute Chronic Work Ratio
2. Posterior Mucles Shoulder Endurance
3. Hand Entry error

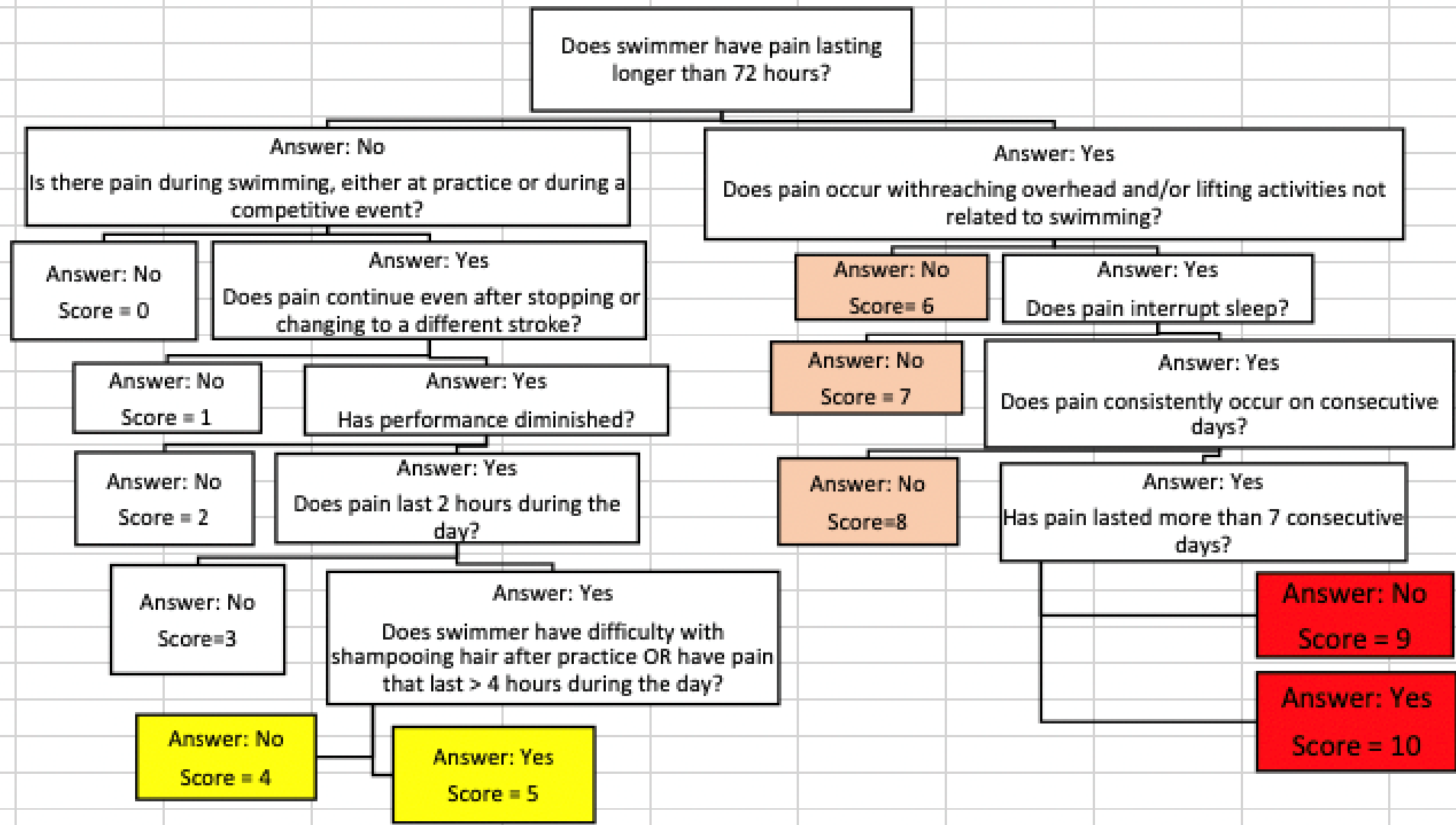
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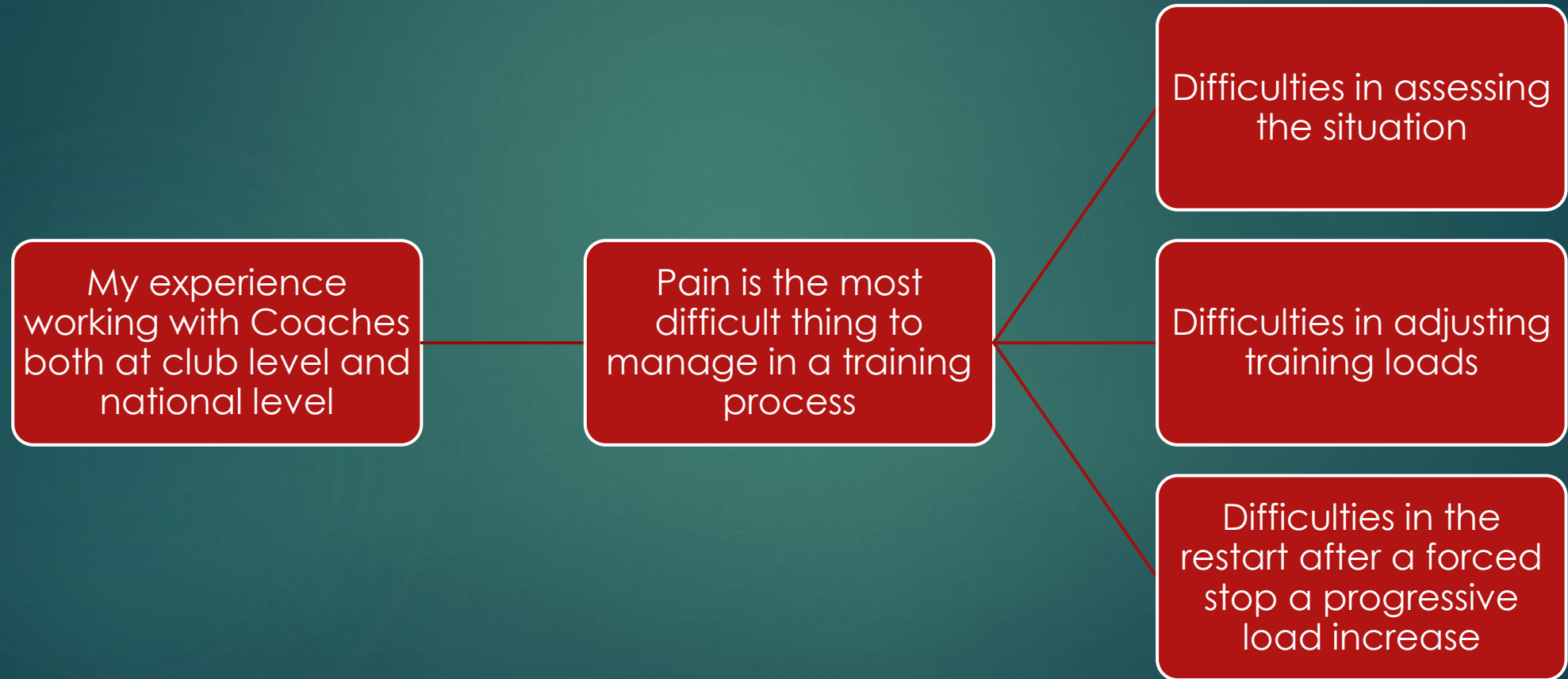
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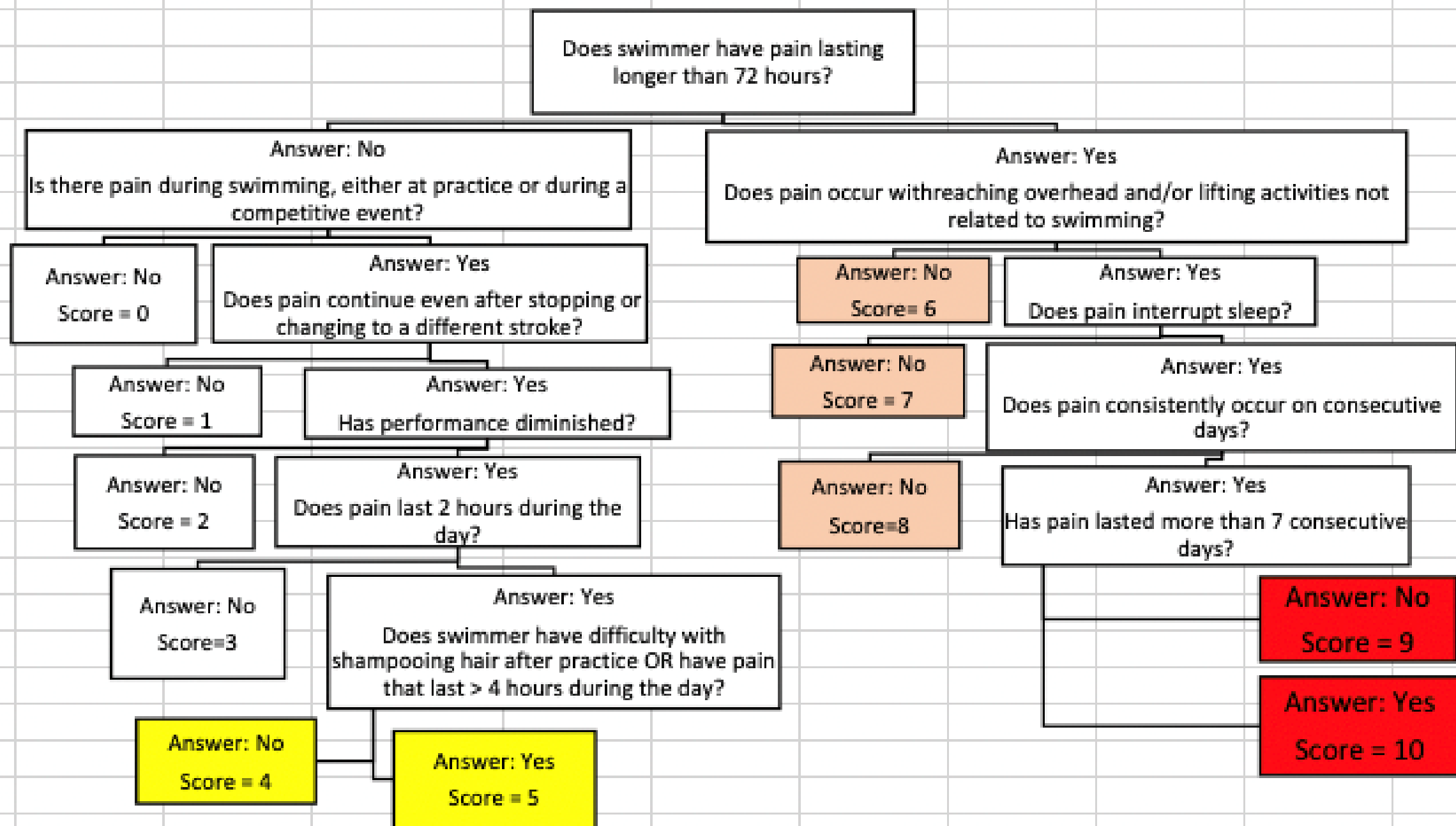
Predict Injury!



Your Score Today

PAIN and Injury





1- Pain Characterization

- What part of the stroke? Entry, Pull-through or Recovery
- During which specific movement?
- Where? Anterior/lateral/posterior
- Describe the Nature of the pain? Burning, Sharp, Dull Persistent.
- When did it start? Warm up/ During main set/ Before Training
 - Insidious or sudden onset?
- Intensity of the pain? Look at SPFS next page

2-Coach Assessment

About training:

- Sudden increase in training intensity or volume?
- Any recent technique changes
- Mileage and hours swum per week?
- Breathing pattern?
- Use of training devices?
- Hours of land training/ weight training?
- Percentage of training in different strokes?

3 -Technical Faults

- Body roll?
- Breathing pattern?
- Striving for a long arm stroke?
- Crossing the midline after hand entry or during pull through?
- Dropped elbow during pull through or/and entry?
- Hand early in front of the elbow during recovery?
- Scapula setting
- Trunk Rotation?

6 - Reassessment

- Improvement:
 - > continue, Check SPFS
- No clear diagnosis or no improvement on initial treatment plan:
 - > Consider investigations, refer to experienced sports medicine physician or physiotherapist in swimming. Look SPFS next page.

5- Management plan:

- Adjust training load
- Adjust swimming technique:
 - shorter arm stroke
 - Improve technique 'faults' found in 3.
- Advice on use of training devices
- Adjust percentage of the 4 strokes swum during training sessions
- Sport specific physiotherapist to optimize clinical findings in 2 and 3. SPFS next page. Keep in mind performance goals: short-term, mid-term and long-term

4 - Red Flags?

- Neuralgic signs
- Vascular signs
- Referred pain
- Inflammation signs

1- Pain Characterization

- What part of the stroke? Entry, Pull-through or Recovery
- During which specific movement?
- Where? Anterior/lateral/posterior
- Describe the Nature of the pain? Burning, Sharp, Dull Persistent.
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2-Coach Assessment

About training:

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- Any recent technique changes
- Mileage and hours swum per week?
- Breathing pattern?
- Use of training devices?
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 - > continue, Check SPFS

- No clear diagnosis or no improvement on initial treatment plan:

 - > Consider investigations, refer to experienced sports medicine physician or physiotherapist in swimming. Look SPFS next page.



Working with Pain levels

- ▶ 0 (zero) is pain free and 10 is unbearable pain.
- ▶ 1 to 3. Pain should try to be managed during training sessions.
- ▶ **4 to 5**. Focus on recovery procedures during training, contact a Health Professional (Physio, Massage, Osteopathy)
- ▶ **6 to 8**. training should be stopped and contact a Health Professional (Physio, Massage, Osteopathy, Physician).
- ▶ **9 to 10**. This could constitute an emergency. Contact Physician as soon as possible.



Working with Pain levels

- ▶ SPFS FROM 1 TO 3
- ▶ Go through the Coach Assessment (2) and Technical Faults (3)
- ▶ If pain is during warm-up. Consider adjusting Dryland warm-up
 - ▶ Consider Decreasing Intensity
 - ▶ Consider Decreasing Volume
 - ▶ Consider Introducing Fins if possible
 - ▶ Consider Changing technique during the training to a pain free technique
 - ▶ Changing Stroke



Working with Pain levels

SPFS FROM 4 TO 5

- Go through the Coach Assessment (2) and Technical Faults (3)
- If pain is during warm-up. Consider adjusting Dryland warm-up
 - Decrease Intensity
 - Decrease Volume
 - Consider Introducing Fins if possible
 - Consider Changing technique during the training to a pain free technique
 - Changing Stroke
- Contact Physiotherapist, Massage, Osteopathy responsible for Athlete



Working with Pain levels

SPFS FROM 6 TO 8

- Go through the Coach Assessment (2) and Technical Faults (3)
 - o Stop Training
 - o Contact Physiotherapist, Massage, Osteopath responsible for the Athlete.



Working with Pain levels

SPFS FROM 9 TO 10

- Stop Training. This could constitute an emergency.
- Go through the Coach Assessment (2) and Technical Faults (3)
- Contact Physician.
- Contact Physiotherapist, Massage, Osteopathy responsible for Athlete

•1-Pain Characterization

•- What part of the stroke? Entry, Pull-through or Recovery	Entry		Pull- Through		Recovery	
•- During which specific movement?	Descending		Ascending		Inner Action	
•- Where? Joint?		Anterior		Lateral		Posterior
•- Describe the Nature of the pain?	Burning		Sharp		Dull/Persistent	
•- When did it start?	Before Training		Warm-up		Main Set	
- Insidious or sudden onset?	Insidious			Sudden		
•- Intensity of the pain? Look at SFPS next page, Pain under 4	SPFS					

•2-Coach Assessment

•About training:						
•- Sudden increase in training intensity or volume?	Yes		No			
•- Any recent technique changes	Yes		No			
•- Mileage and hours swum per week? (when applicable)	Right		Left		Bilateral	
•- Breathing pattern?	Right		Left			
•- Use of training devices?	Training pads		Fins			
•- Hours of land training/ weight training?	Increase		Same		Decrease	
•- Percentage of training in different strokes?	Changed?		Same?			

•3 -Technical Faults

•- Body roll?	Asymmetrical		Symmetrical		
•- Breathing pattern?	Asymmetrical		Symmetrical		
•- Striving for a long arm stroke?	Yes		No		
•- Crossing the midline after hand entry	Yes		No		
•or during pull through?	Yes		No		
•- Dropped elbow during pull through or/and entry?	Yes		No		
•- Hand early in front of the elbow during recovery?	Yes		No		
•- Scapula setting	Asymmetrical		Symmetrical		
•- Trunk Rotation?	Asymmetrical		Symmetrical		

•4 - Red Flags?

•- Neuralgic signs	Numbness		Cold		Other Pins and Needles
•- Vascular signs	Redness		Bruising		Swelling
•- Referred pain	Shooting pain				
•- Infammation signs	Warm		Redness		Swelling

•5- Management plan:

•- Adjust training load					
	Decrease Intensity				
	Decrease Volume				
	Changing of Technique				
•- Adjust swimming technique:					
	shorter arm stroke				
	Improve technique 'faults'				
•- Advice on use of training devices	Fins				
•- Adjust percentage of the 4 strokes swum					
	during training sessions				
•Keep in mind performance goals	Short- Term		Mid- Term		Long- Term

•6 - Reassessment

•- Improvement: continue. Check SPFS, Pain under 4				
•- No improvement on initial treatment plan, Pain over 4	Refer to Sports Physician		Refer to Physio, Massage, Osteopath	