Module 2. Injury Prevention, Recovery Process, Re-adaptation and Monitoring of the Recovered Player

Introduction

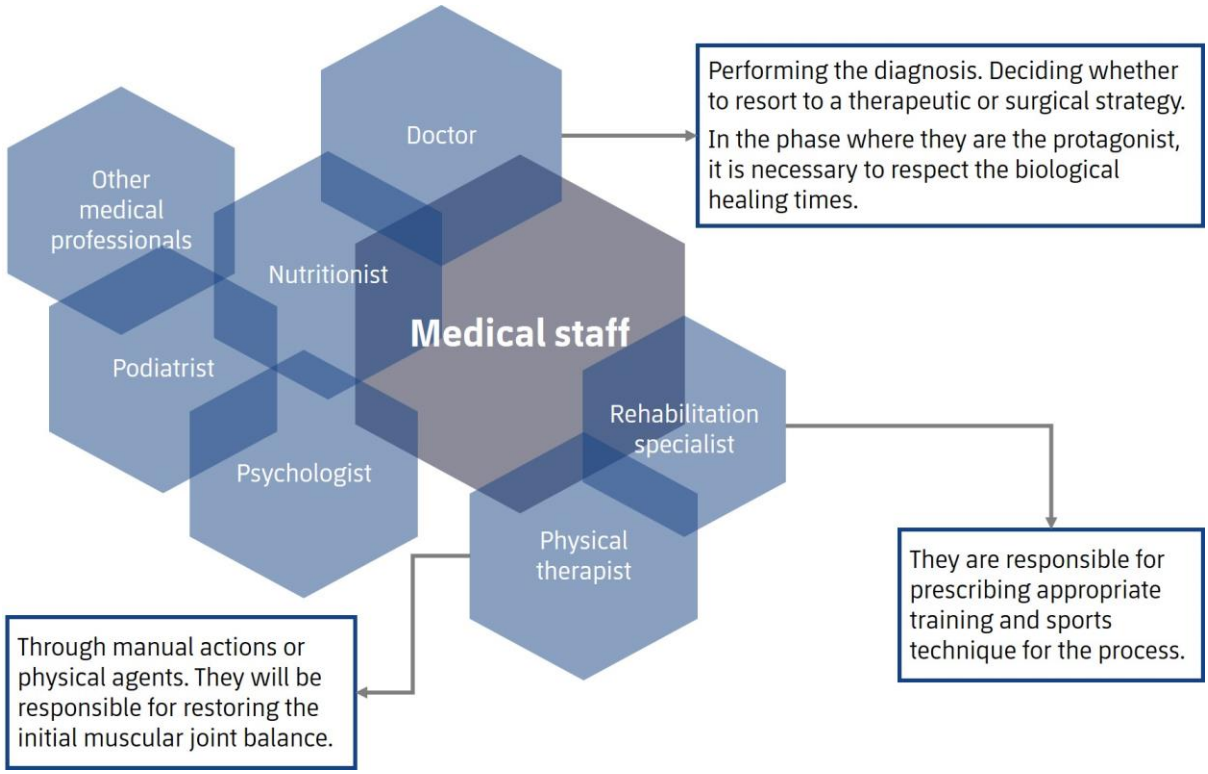
In the last years, women's football has developed exponentially. This results in a specific evolution of the medical staff who are responsible for carrying out a better understanding of the female football players' characteristics, physical demands, health needs, and performance.

For that reason, a key aspect is the specific knowledge of that evolution, as shown by Okholm (Okholm et al., 2021) in her research into women's football. This progress has its starting point in 1939 with the first publication and it has continued for the following years. Currently, the number of studies per year has gradually increased, reaching peaks in the years of the FIFA World Cups (2003, 2007, 2011, 2015, 2019). This last year was the one with the highest number of publications, a total of 202 studies. The most researched area was injuries in women's football.

Unit 2.1 The Protagonists of The Process

> The success of the injury relies on the combination of each of its components, and its longevity is the outcome of the proper work by the protagonists at the right time and their involvement, with continuous dialogue being the key. (Ekstrand et al., 2019).

Image 1: The Protagonists of the Process



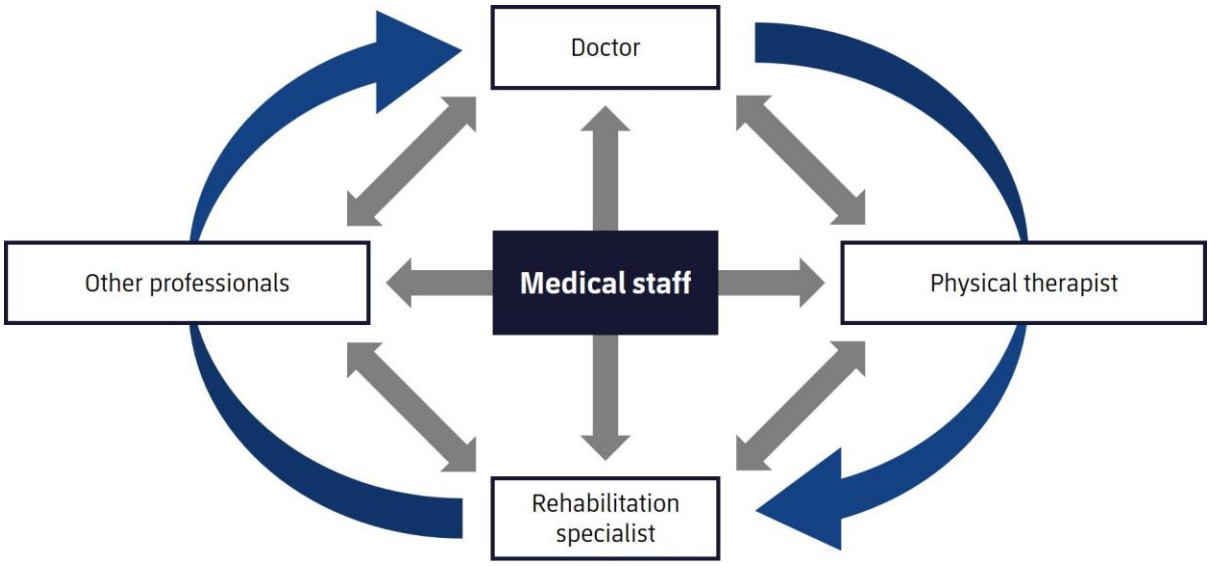
Source: prepared by the authors based on Lalín and Peirau, 2011.

Otros profesionales médicos	Other medical professionals
Médico/a	Doctor
Nutricionista	Nutritionist
Podólogo/a	Podiatrist
Staff médico	Medical staff
Psicólogo/a	Psychologist
Readaptador/a	Rehabilitation specialist
Fisioterapeuta	Physical therapist

Mediante acciones manuales o agentes físicos. Será quien se encargue de recuperar el balance articular muscular inicial	Through manual actions or physical agents. They will be responsible for restoring the initial muscular joint balance.
Realización del diagnóstico. Decidir si recurrir a una estrategia terapéutica o quirúrgica	Performing the diagnosis. Deciding whether to resort to a therapeutic or surgical strategy.
En la fase donde es protagonista es necesario respetar los tiempos biológicos de cicatrización	In the phase where they are the protagonist, it is necessary to respect the biological healing times.
Se encarga de pautar el entrenamiento y la técnica deportiva adecuada al proceso	They are responsible for prescribing appropriate training and sports technique for the process.

As seen in image 2, communication flows in all directions. The information and resolution of medical cases are carried out in teams. Each professional expresses their point of view based on their knowledge and experience in the area. Specialisation is needed to understand the evolution and processes to be followed during the injury process of the player.

Image 2: Communication Process During the Recovery Process



Source: prepared by the authors, Hueso, 2022.

Médico/a	Doctor
Otros profesionales	Other professionals
Fisioterapeuta	Physical therapist
Readaptador/a	Rehabilitation specialist
Staff Médico	Medical staff

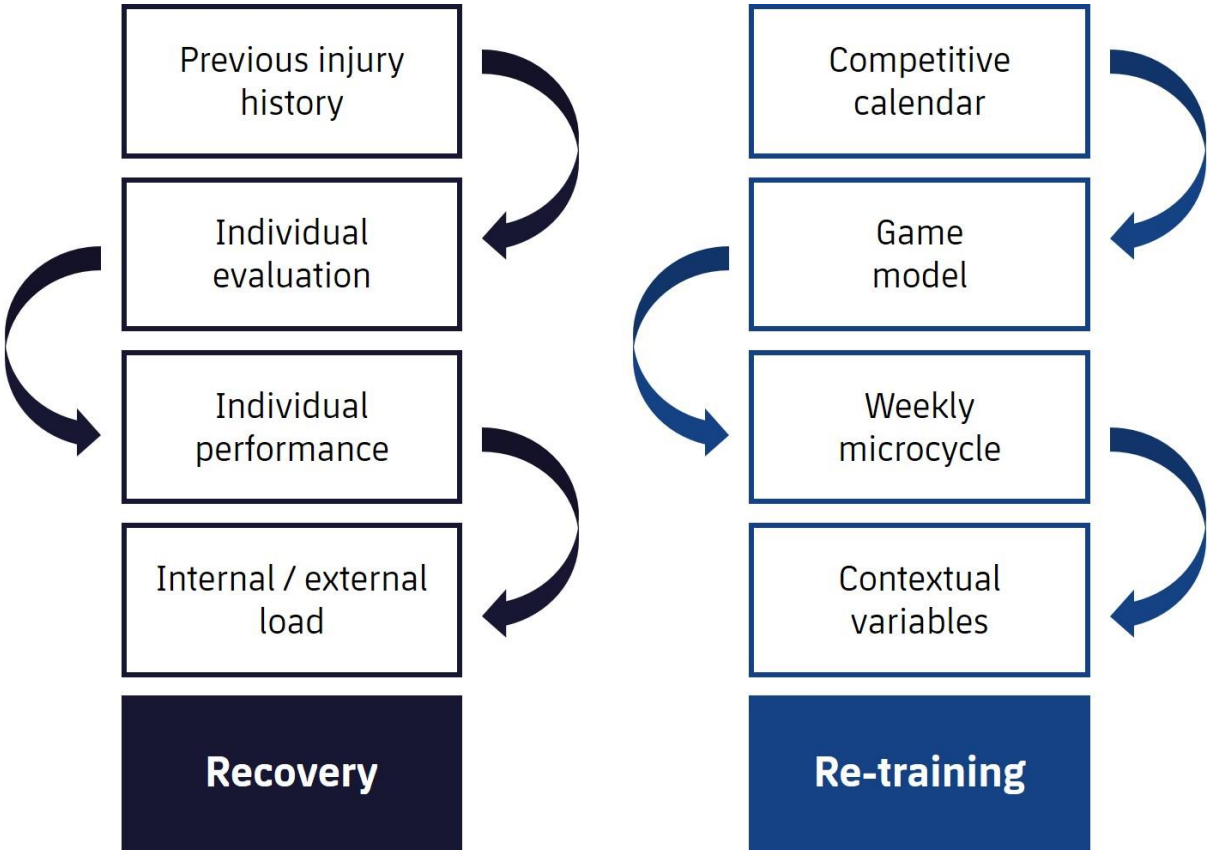
Unit 2.2 Injury Prevention

Next in this module we will discuss the importance of carrying out preventive action, based on the foundation mentioned in the first module of the 4th course. Thanks to understanding the main biomechanical characteristics and the most important risk factors in women's soccer, we will be able to properly plan this type of work and give it prominence in the player's microcycle.

2.2.1 Variables to Consider Prior to Planning Preventive Work

The aspects to take into account during the planning phase of this work are:

Image 3: Variables to Consider in the Planning of Prevention Work



Source: Prepared by the authors, Hueso, 2022.

Antecedentes lesivos	Previous injury history
Evaluación individual	Individual evaluation

Rendimiento individual	Individual performance
Carga interna/externa	Internal/ External load
Recuperación	Recovery
Calendario competitivo	Competitive calendar
Modelo de juego	Game model
Microciclo semanal	Weekly microcycle
Variables contextuales	Contextual variables
Reentrenamiento	Re-training

Player's Profile

It is essential to study the player's characteristics in an analytical and dynamic way with the aim of getting most of the information.

- Previous injury history: knowledge of tissue quality and evolution of injury profile. Pay attention to whether there have been recurrences or not.

  If there is a repetition of injuries/overloads in the same muscle area, it is important to pay attention.

- Individual evaluation: observation of their movement in a real game situation. Learning their most common motor patterns will help us create supportive work for those parts that do not act automatically.

  The player always initiates movement with the same leg. We will assist the player in activating their non-dominant side during their preventive action to avoid overactivation of the dominant side.

- Individual performance: the player's individual physical capacity, characteristics in their game. Adaptation of the work to meet their field demands.

During one week, the player has performed a high number of accelerations (ACC) and decelerations (DCC). It will be important to help the entire posterior chain recover through a good foundation of neural action/mobility.

- Internal/external load: exposure to competitive minutes, continuity with the team, positioning on the field, off-team care habits.

  The player is currently taking exams, and their sleep quality is not positive, increasing their fatigue prior to training. Communication with the coaching staff is essential to inform them of the player's performance decline due to this issue and to protect the player.

Profile of the Team

In each team, every year, and depending on the stage of the season we are in, a different style of play may be used. This can modify the individual demands on the player. We need to be able to adapt to the following variables in order to achieve better efficiency in the player's assimilation of the work.

- Competitive schedule: Sometimes we encounter periods where the competitive load is high. In these moments, adapting the work is a key point.

  In a week with matches on Wednesday and Sunday, the regenerative actions in the days leading up to the match will be of great importance.

- Style of play: Each player has a role on the field that can vary depending on the team's needs.

  It is very common to change players' positions depending on the competitive situation. For example, when a player changes their role, their demands also change. Depending on the position, different characteristics are encountered. Analysing GPS data will help us anticipate improvements in the efficiency of preventive work, helping the player be better prepared.

- Weekly microcycle: This is determined by the competitive schedule, a*s mentioned earlier. Ideally, we should anticipate it as soon as possible.*

- Contextual variables: Changes in playing surfaces, time spent and means of transportation, away or home matches, etc. All these types of variables do not depend on the player. That's why anticipation is key.

  It is challenging to control these variables, but it is important to be aware of them to understand possible player discomfort. For example, when there is a change from a

natural to an artificial playing surface, we may encounter overloads in the abductors and calves or discomfort in the lumbar area due to the increased impact on a hard surface.

2.2.2 Types of Prehabilitation Based on Different Moments in the Preventive Work:

Now we will present those preventive actions that must be considered depending on the stage of the season we are in.

Pre-training

- Activation of the entire system and reinforcement of deficits.
- No fatigue.
- Reduced number of repetitions.
- Neuromuscular.
- Smooth movement execution.

Post-training

- Adaptation of the work to external/internal load.
- Increased number of moderate strength exercises.
- Neuromuscular fatigue.
- Full mobility.

Day before the match:

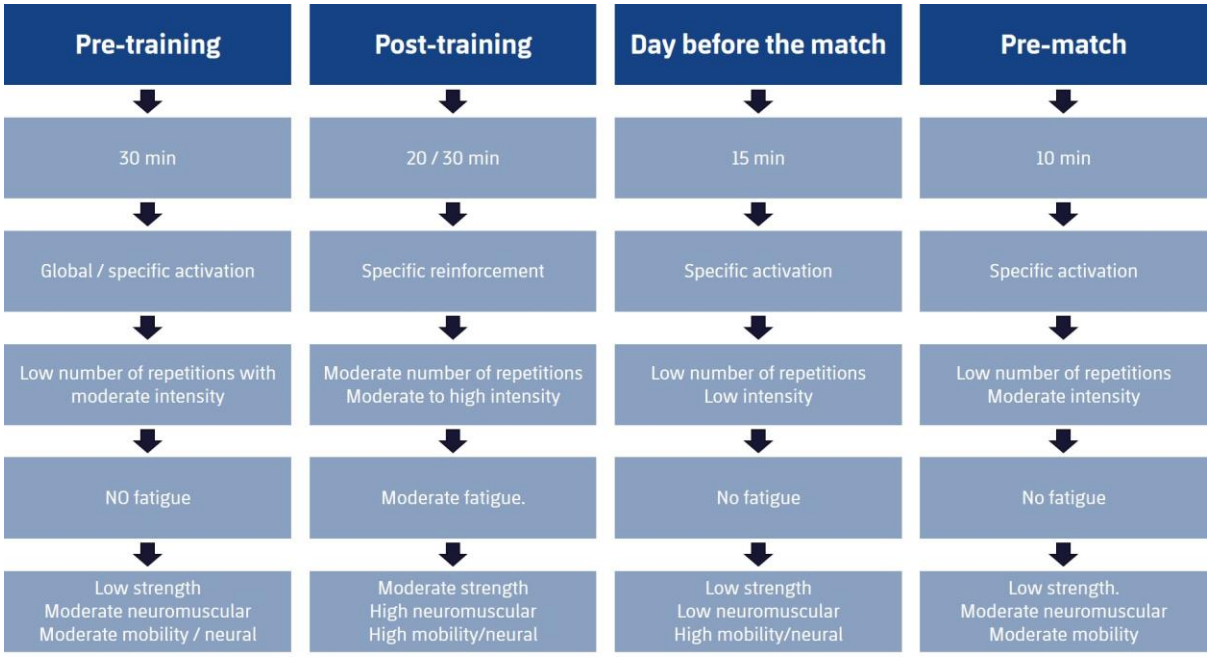
- Dynamic mobility and complete neural action.

- Stabilization and core exercises.

Pre-match (40'/30')

- Action based on player's sensations.
- Lower workload.
- Highly focused work on individual aspects of the player.

Image 4: Important Aspects of Prehabilitation According to the Moment



Source: Prepared by the authors, Hueso, 2022.

Pre-entrenamiento	Pre-training
30 min	30 min
Activación global/específica	Global/specific activation
N° Rep bajo intensidad media	Low number of repetitions with moderate intensity.

NO fatiga	NO fatigue.
Fuerza baja. Neuromuscular media. Movilidad/neural media	Low strength. Moderate neuromuscular. Moderate mobility/neural.
Post-entrenamiento	Post-training
20/30 min	20/30 min
Refuerzo específico	Specific reinforcement
N° Rep medio. Intensidad media/alta	Moderate number of repetitions. Moderate to high intensity.
Fatiga media	Moderate fatigue.
Fuerza media. Neuromuscular alta. Movilidad/neural alta	Moderate strength. High neuromuscular. High mobility/neural
Día antes de partido	Day before the match
15 min	15 min
Activación específica	Specific activation
N° Rep bajo. Intensidad baja	Low number of repetitions. Low intensity
No fatiga	No fatigue
Fuerza baja. Neuromuscular baja. Movilidad /neutral alto	Low strength. Low neuromuscular. High mobility/neural
Pre-partido	Pre-match
10 Min	10 min

Activación específica	Specific activation
N° Rep bajo. Intensidad media	Low number of repetitions. Moderate intensity.
No fatiga	No fatigue
Fuerza baja. Neuromuscular media. Movilidad media.	Low strength. Moderate neuromuscular. Moderate mobility

It is a type of work whose objective is to improve the individual deficits of each player. We start from the same premise: adaptation, at all times, to the player's condition and team load.

2.2.3 Objectives of Preventive Work

One of the challenges with our players is to make them non-fragile players while also having a high capacity for versatility in their movements. Not an easy task, as Bosch mentions in his book (Bosch, Cook, 2015): *"creating adaptable athletes, not adapted athletes."* The complexity lies in respecting the movement of the sport and helping our football player to be able to achieve automatisms in solving the different movement demands of football.

We encounter aspects such as the complexity of movement, the definition of football technique, and the creation of system adaptations to meet those demands.

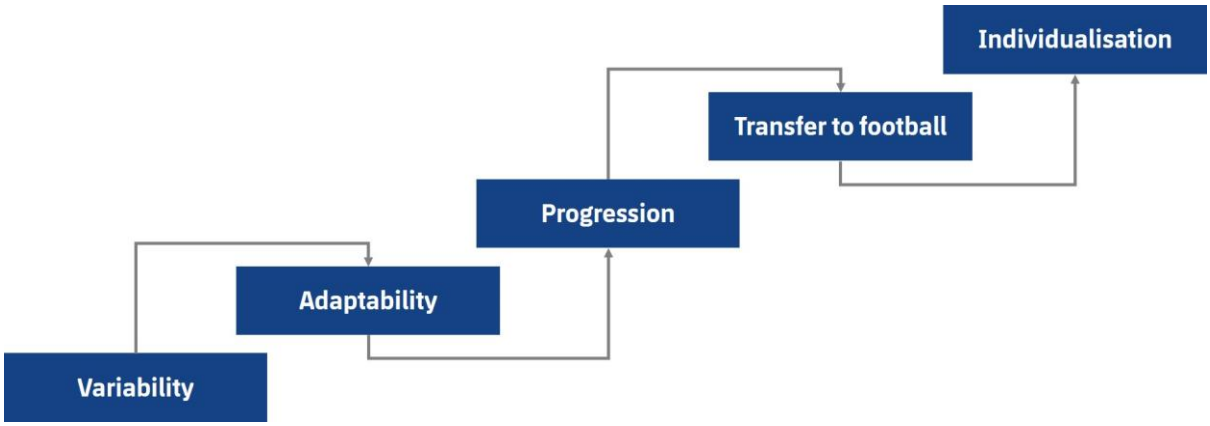
To do this, we must help our football player learn these movement patterns (Bosch, Cook, 2015):

- Achieve good synergy of all parts of the body, good timing of activation.
- Always train with focus, both internally and externally.
- Repetition will give us automatism, but variation will lead to improved learning.
- Efficiency in training planning.

    ✓ Generate a positive stimulus for improvement.

- ✓ Generate a gradual and assimilable demand for the football player: simple-complex.
- ✓ Focus on progressive and dynamic improvement of deficits, integrating them into movement patterns.
- ✓ Versatile action: the ability to adapt to the different demands of the game.
- ✓ Avoid generating residual loads, efficiency.

Image 5: Objectives of Preventive Work



Source: Prepared by the authors, Hueso, 2022.

Variabilidad	Variability
Adaptabilidad	Adaptability
Progresion	Progression
Transferencia fútbol	Transfer to football
Individualización	Individualisation

All this work is integrated into a comprehensive training base where, in a less specific manner, we will work on the rest of the structures involved in the sport. It is important for the progression in this type of work to focus on adapting the system to different demands

and improving deficits. It is interesting to be aware of our players' menstrual cycle and premenstrual symptoms to help control the workload and intensity of the training.

Unit 2.3 Recovery and Re-adaptation Process

Sport functional re-education is a process proposed by Lalín and Peirau (2011) that covers the period from the occurrence of an injury to the return to competition. It is a protocol with the following main objectives to work on:

1. Anticipate the occurrence of injury.

2. In the event of an injury, guide the player in returning to competition with physical conditions equal to or better than before the injury occurred.

3. Re-educate the player's previously perfect sports gestures and correct movements that were altered due to the injury.

4. Achieve a high physical demand, restoring the injured tissue's ability to tolerate effort.

   As additional characteristics of the process, the focus given to each injury's recovery is essential. This protocol for sport functional re-education works with a comprehensive approach to the player, taking into account three aspects from the beginning: physical, psychological, and social.

All of this, without forgetting an essential premise: planning prevention before the occurrence of the injury, not waiting to recover and then working on prevention for relapse. This will help us reduce the severity of the injury when it occurs.

Image 6: Recovery and Re-adaptation Process Prevention

Source: prepared by the authors, Hueso, 2022.

Prevención	Prevention
Recuperación	Recovery

2.3.1 Generic Stages of the Injury Process

Every injury involves a type of work in its recovery, classified in different stages according to the time since the injury occurred (Andrews, 2004) In turn, injuries are divided into sub-phases based on the characteristics of the injury and the internal and external factors of the player.

1. Recovery

- Clinical objectives.

  The player must be able to perform activities of daily living with ease.

  In this phase, working together with the rest of the medical team from the very beginning on the affected area in a more analytical way is of special importance.

  We will aim for the player's autonomy along with the work of basic skills focused on the development of the movement of the affected area, gaining initial abilities in terms of strength and range of motion. Throughout the process, we will consider

the possible asymmetry of the collateral side, so the use of different measurement methods to monitor the progress and effectiveness of the work will be important.

We will continue towards the integration of the injured area, focusing on more functional, coordinative/activation work of the structures in that area and correcting possible imbalances.

2. Re-adaptation:

- Functional objectives.

Emphasis is placed on physical condition, leading the player to re-perform those basic skills that affect the injured part, always progressing from simple to complex movements.

At this stage, it is important that the recruitment and timing of the injured area are positive, in order to create a motor pattern base with a structure capable of supporting movement variability.

When the player is in perfect condition and achieves progressive performance values, both in terms of strength and data obtained from the Global Positioning System (GPS), as well as the acquisition of fluid basic motor patterns, we will move on to the next objective.

3. Re-training:

- Specific objectives.

The player must be able to execute the technical elements specific to football and the position on the field in which the injured structure was affected. Now, preventive tasks are introduced to facilitate the correction of injurious actions and minimise the injury risk.

The reality of the actions performed by the injured player will be paramount. We will take into account training in fatigue of the injured area in order to create sessions with greater complexity and demands, bringing the reality of the sport into the re-adaptation session. The GPS values are real, reaching their previous records prior to the injury.

Neuromuscular fatigue will be an indicator to consider. This will lead us to constantly measure the assimilation and response capacity of the injured area. Controlling this aspect is essential, differentiating the load on the injured area from that on the rest of the body.

Once all the concepts and premises have been assimilated, and after passing the measurement controls, we will gradually integrate the player into the group under the guidance of the physical trainer and in agreement with the entire medical team (Lalín C., 2011).

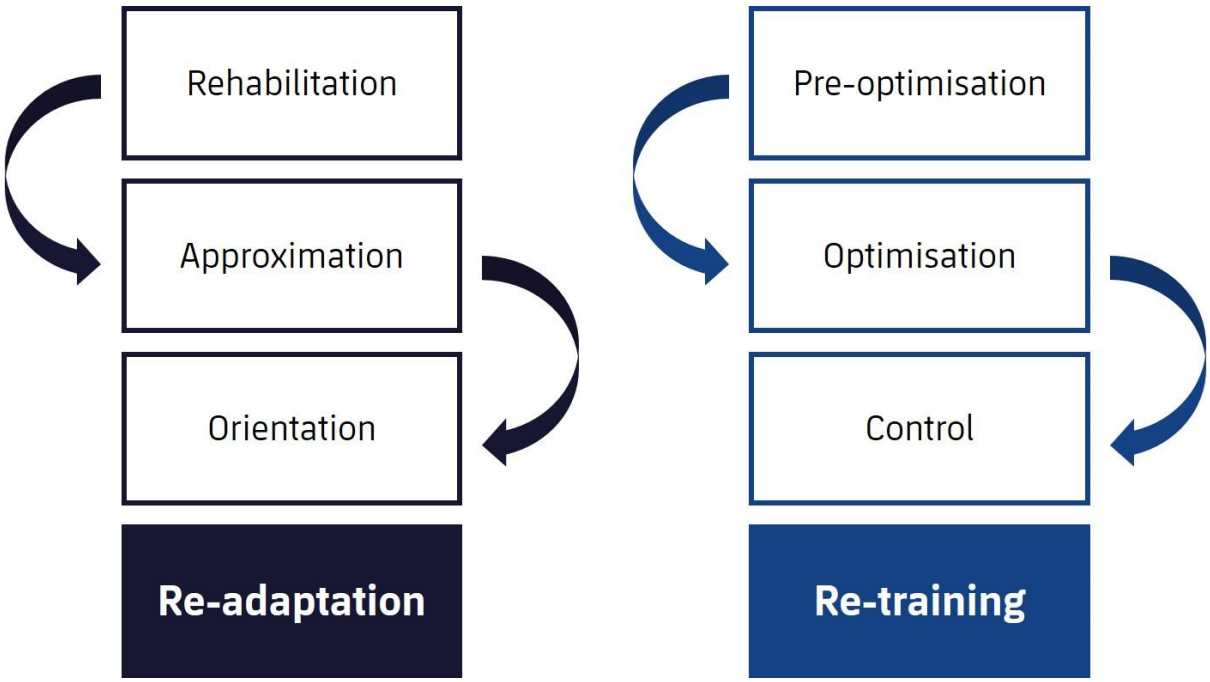
2.3.2 Return to Play Phases

Globally, we will divide this stage into two types of training: a more **general** one, in which the main focus will be on maintaining physical condition, and a **specific** one, where re-education, progression, and optimisation of performance prerequisites and assumptions will prevail. In this specific training, the affected tissue will be subjected to a greater physical-functional commitment in an appropriate, safe, and progressive manner (Lalín C., 2011).

We will take into account the following as forms of progression in optimal conditioning development:

1. **Neuropsychomotor**: ideomotor training, psychomotor skills, etc.
2. **Bioenergetic**: specific physiological characteristics.
3. **Biomechanical:** arthromuscular behaviour during the sequences of the movement to be re-educated.
4. **Cognitive-informational**: actions that involve the gesture and specific game actions, according to the defining phases: perception, decision-making, and execution (Lalín C., 2011).

Image 7: Return to Play Phases



Source: prepared by the authors, Hueso, 2022.

Rehabilitación	Rehabilitation
Aproximación	Approximation
Orientación	Orientation
Readaptación	Re-adaptation
Pre-optimización	Pre-optimisation
Optimización	Optimisation
Control	Control
Reentrenamiento	Re-training

Rehabilitation

- Beginning of work with the injured player: we will aim at maintaining physical condition and strength in the non-injured areas, along with learning very basic

motor patterns. Progression while respecting the sensations and biological timing of the injured tissue. Use of motor imagery systems (Cuenca Martínez, 2021).

Approximation

- Work on the injured area: the type of work will depend on aspects such as the characteristics of the injured player, their assimilation and adaptation to different stimuli (Pruna, 2013), the severity of the injury, the type of injured tissue, and the quality of the injured tissue. These aspects will determine the type of planning to be carried out. Motor learning, proper recruitment, and timing of the affected area.

Orientation

- Increase in session complexity. Significant work on building player's confidence in the injured area. Progressive, controlled, and focused demand on specific football performance where the injured area plays a prominent role: reactive actions of CEA. It is important to consider criteria for the evolution of the injured area (Tassignon, 2019).

Pre-optimisation

- The moment when everything learned and trained in the injured area is transferred to the specific demands of football. Integration of real motor patterns into the player's specific position on the field and situations with increased fatigue. Controlling the player's internal and external loads is key (Taberner, 2019).

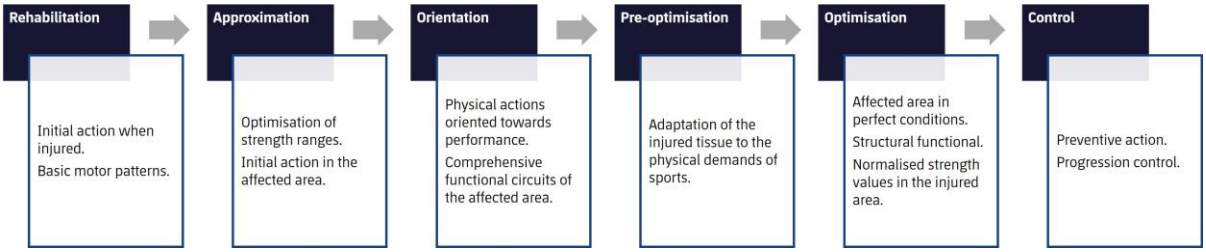
Optimisation

- Quantitative and qualitative evaluation of the injured area, aiming for strength, timing, and range of motion values equal to the unaffected side and better than the player's pre-injury assessments. There is no pain, and the player is in an optimal state for performing real *cooperative-oppositional* actions and progressively integrating with the team. Adapting the player's effort is crucial, not only externally but also internally, as it is a moment in which the player processes a large amount of information that leads to increased neuromuscular fatigue (Martínez-Serrano et al., 2022).

Control

- Player monitoring during the integration process with the team. Planning specific preventive work for the recovered injury and accompanying the player in pre- and post-team training. Adapting the load of these actions to the player's evolution and assimilation of different stimuli from the team is crucial.

Image 8: Return to Play Phases



Source: prepared by the authors based on Lalín, Peirau, 2011.

Orientación	Orientation
Acciones físicas orientadas hacia el rendimiento. Circuitos funcionales integrales de la zona afecta	Physical actions oriented towards performance. Comprehensive functional circuits of the affected area
Rehabilitación	Rehabilitation
Acción inicial lesionado Patrones motores básicos	Initial action when injured Basic motor patterns
Control	Control
Acción preventiva. Control progresión	Preventive action Progression control
Optimización	Optimisation
Zona afecta en perfectas condiciones Estructural Funcional Valores de fuerza normalizados en zona lesionada	Affected area in perfect conditions Structural functional Normalised strength values in the injured area.
Pre-optimización	Pre-optimisation

Adaptación del tejido lesionado a la exigencia física deportiva	Adaptation of the injured tissue to the physical demands of sports
Aproximación	Approximation
Optimización rangos fuerza Acción inicial zona afecta	Optimisation of strength ranges Initial action in the affected area

2.3.3 Return to Play Objectives

- ✓ Progressive actions in complexity and variability.
- ✓ Explanation of objectives to the player, making them protagonists in the recovery process - personalisation.
- ✓ Monitoring - measurement - evaluation.
- ✓ Invisible training.
- ✓ Short-term goals with achievable objectives.
- ✓ Capacity for regression.
- ✓ Re-education of motor patterns.

Image 9: Return to Play Objectives

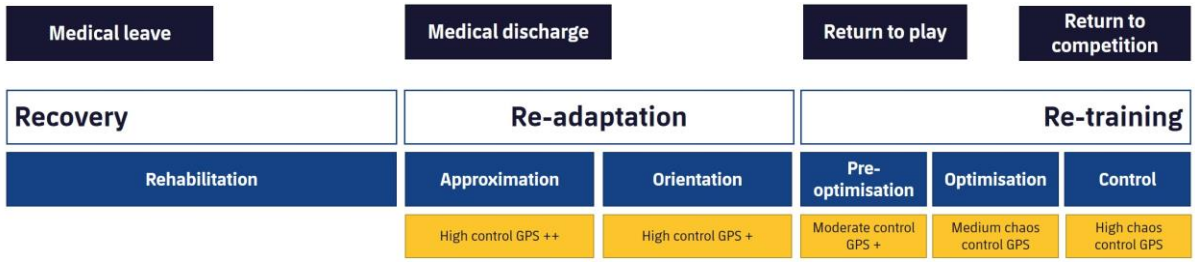
Source: prepared by the authors, Hueso, 2022.

Objetivos RTP	Return to Play Objectives.
Refresión-reducación movimiento	Regression - re-education of movement.
Simple-complejo	Simple-complex.
Jugadora protagonista	Player as protagonist.
Seguimiento cuantitativo-cualitativo	Quantitative-qualitative monitoring.
Entrenamiento invisible	Invisible training
Objetivos corto plazo-alcanzables	Short-term achievable objectives

To help focus on the ideas previously discussed, image 10 provides a summary table that shows the medical timelines and the use of GPS in correlation with the different stages of the injured player's support process.

We must not forget that when talking about this type of work, there are numerous variables that determine progression in the different stages. Therefore, we need to study each injury in a unique and individual way.

Image 10: Return to Play Phases



Source: prepared by the authors based on Taberner, 2019.

Baja médica	Medical leave
Alta médica	Medical discharge
Alta deportiva	Return to play
Alta competitive	Return to competition
Recuperación	Recovery
Readaptación	Re-adaptation
Reentrenamiento	Re-training
Rehabilitación	Rehabilitation
Aproximación	Approximation
Orientación	Orientation
Pre-optimización	Pre-optimisation

Optimización	Optimisation
Control	Control
GPS control alto	High control GPS
Medio	Moderate
Medio Caos	Medium chaos
Alto caos	High chaos

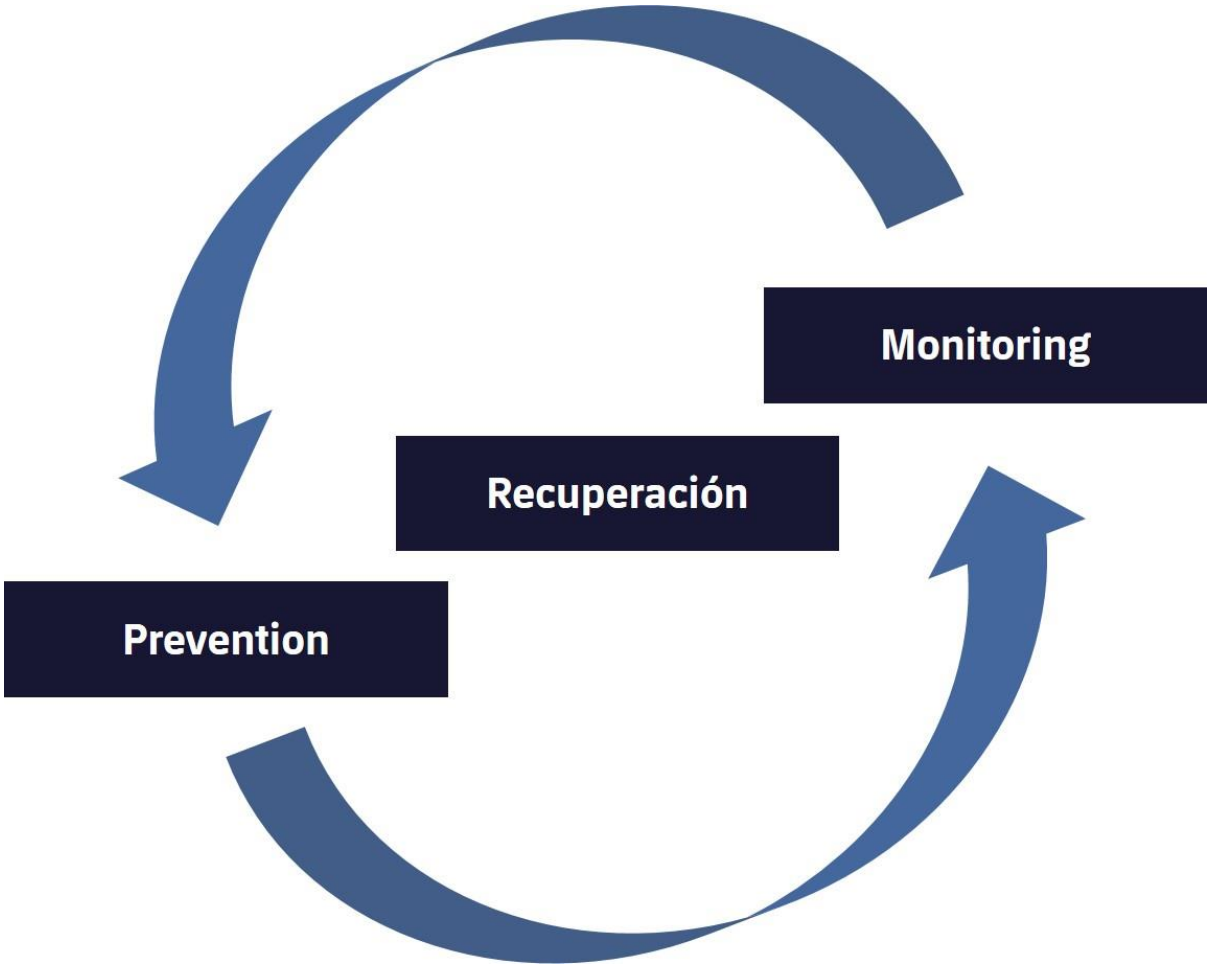
Unit 2.4 Monitoring the Recovered Player

One of the most challenging aspects of the injury recovery process in high-performance sports is finding a balance between the biological time required for tissue repair and the competitive demands. That's why the support process for the injured player does not end with their return to competition; it's necessary to continue working with the player and monitoring their gradual assimilation of internal and external loads to prevent recurrences.

During this process, the player will gradually require less individualised supervision and gain more autonomy through knowledge acquisition and individualised planning.

This is where the circle closes and a loop is created between preventive work and ongoing monitoring.

Image 11: Circle of the Work Process Between the Re-adaptation Professional and the Injured-recovered Player



Source: prepared by the authors, Hueso, 2022.

Seguimiento	Monitoring
Recuperación	Recovery
Prevención	Prevention

Monitoring objectives:

1- GPS load monitoring.

2- Fatigue control adaptation.

3- Visual analysis of the player.

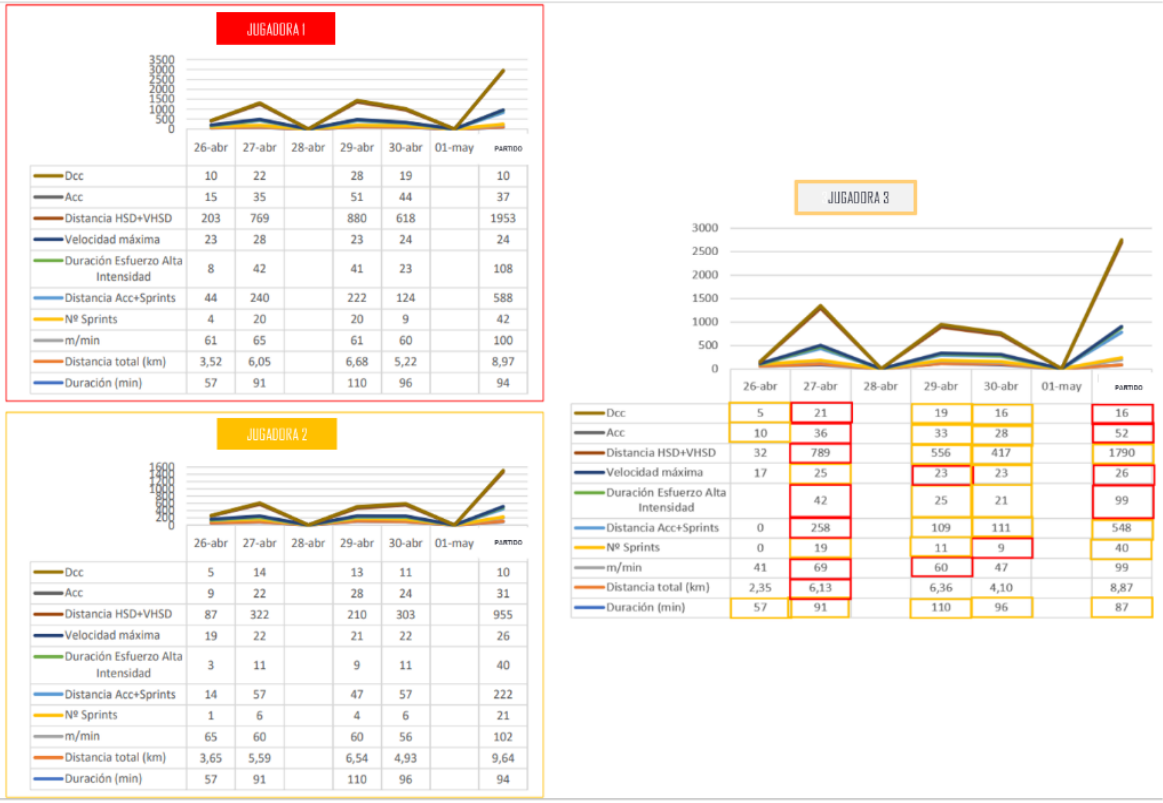
4- Reinforcement of the recovered area.

5- Monitoring of unaffected areas.

As you can see in image 12, a monitoring of the player's external load is performed. We observed the comparison between their parameters and two of their teammates in the same position during the same period of time. This may help us know:

- The physical level of the player in comparison to their teammates in the same position, in a real microcycle situation.
- The evolution of workload assimilation.
- The progression of the individual load of the team - recovered.

Image 12: Visualisation of the Microcycle Team vs. Recovered Player



JUGADORA 1	26-abr	27-abr	28-abr	29-abr	30-abr	01-may	PARTIDO
Dcc	10	22		28	19		10
Acc	15	35		51	44		37
Distancia HSD+VHSD	203	769		880	618		1953
Velocidad máxima	23	28		23	24		24
Duración Esfuerzo Alta Intensidad	8	42		41	23		108
Distancia Acc+Sprints	44	240		222	124		588
Nº Sprints	4	20		20	9		42
m/min	61	65		61	60		100
Distancia total (km)	3,52	6,05		6,68	5,22		8,97
Duración (min)	57	91		110	96		94

JUGADORA 2	26-abr	27-abr	28-abr	29-abr	30-abr	01-may	PARTIDO
Dcc	5	14		13	11		10
Acc	9	22		28	24		31
Distancia HSD+VHSD	87	322		210	303		955
Velocidad máxima	19	22		21	22		26
Duración Esfuerzo Alta Intensidad	3	11		9	11		40
Distancia Acc+Sprints	14	57		47	57		222
Nº Sprints	1	6		4	6		21
m/min	65	60		60	56		102
Distancia total (km)	3,65	5,59		6,54	4,93		9,64
Duración (min)	57	91		110	96		94

JUGADORA 3	26-abr	27-abr	28-abr	29-abr	30-abr	01-may	PARTIDO
Dcc	5	21		19	16		16
Acc	10	36		33	28		52
Distancia HSD+VHSD	32	789		556	417		1790
Velocidad máxima	17	25		23	23		26
Duración Esfuerzo Alta Intensidad		42		25	21		99
Distancia Acc+Sprints	0	258		109	111		548
Nº Sprints	0	19		11	9		40
m/min	41	69		60	47		99
Distancia total (km)	2,35	6,13		6,36	4,10		8,87
Duración (min)	57	91		110	96		87

Source: prepared by the authors, Hueso, 2022.

Jugadora	Female player
Dcc	Dcc
Acc	Acc
Distancia	Distance
Velocidad máxima	Maximum speed
Duración Esfuerzo Alta intensidad	Duration of High-Intensity Effort
Distancia Acc + Sprints	Acc distance + sprints
N° Sprints	Number of sprints

m/min	m/min
Distancia total	Total distance
Duración	Duration
Partido	Match

During the season, modifications to the preventive/activation work will be periodically performed. The aspects to be considered for the modification will be:

- Appearance of injuries:

  the injury will create a modification in motor patterns.

- Ongoing overloads/discomfort in the same body area:

  in many cases, anticipation is the key to avoiding injury.

- Competitive moment and minutes:

  depending on the moment of the season and accumulated minutes.

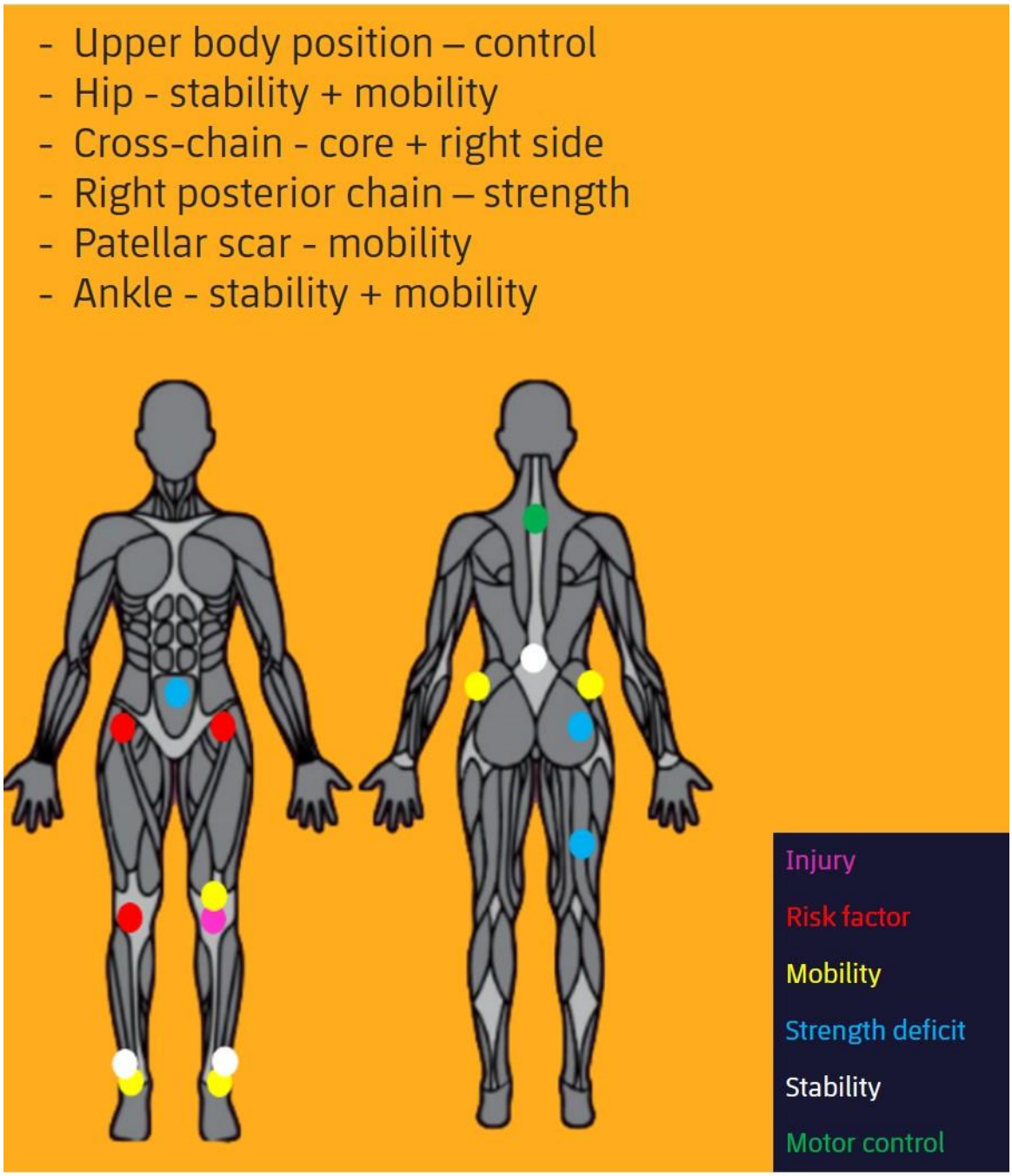
- Progression in assimilating the work:

  We always have to create a new stimulus to improve the player's assimilation and motivation.

- Adapting the player to their professional and personal moment:

  We cannot forget that we work with people, and creating a trusting environment can help make this type of monitoring of higher quality and efficiency.

Image 13: Example Of Analysis Of Aspects To Work On With The Recovered Player



Source: prepared by the authors, Hueso, 2022.

Posición superior – control	Upper body position - control
Cadera – estabilidad + movilidad	Hip - stability + mobility
Cadena cruzada – core + derecho	Cross-chain - core + right side

Cadena posterior der – Fuerza	Right posterior chain - strength
Cicatriz rotuliana – movilidad	Patellar scar - mobility
Tobillo – estabilidad – movilidad.	Ankle - stability + mobility
Lesión	Injury
Factor riesgo	Risk factor
Movilidad	Mobility
Deficit fuerza	Strength deficit
Estabilidad	Stability
Control motor.	Motor control

The example in image 13 is a summary table of the most important aspects to work on and the most appropriate way to do so. This will help us establish the foundation of our prevention/activation work.

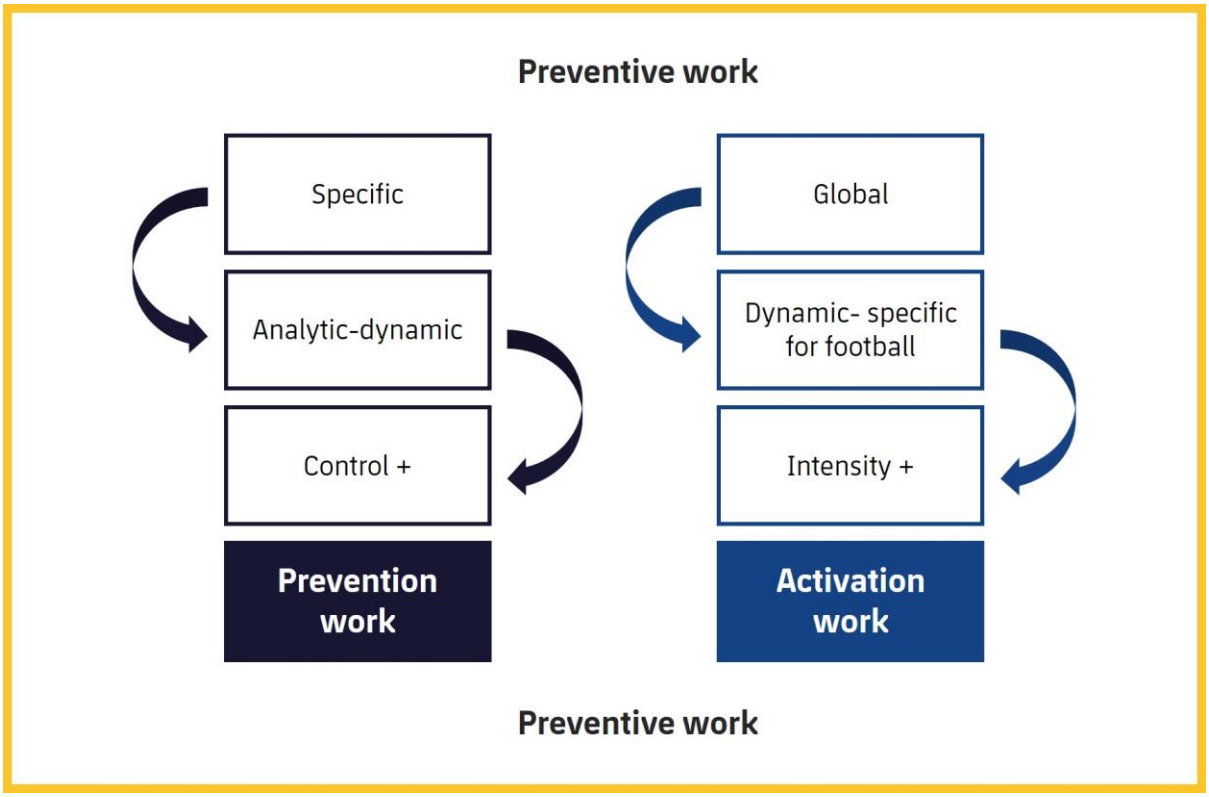
2.4.1 Activation Work

Next, we will discuss activation work, which is encompassed within preventive actions. Both have the same objectives and methodology.

The main difference between prevention work and activation work is when each of them is initiated. Prevention work is created as a result of an injury, with exercises specifically designed for the improvement and re-education of the recovered area, while activation work is created through continuous monitoring of the player, focusing on the overall player's improvement.

This division helps increase control in planning and improve efficiency in the progression of the player's preventive work.

Image 14: Preventive Work: Prevention + Activation



Source: prepared by the authors, Hueso, 2022.

Trabajo preventive	Preventive work
Específico	Specific
Analítico-dinámico	Analytic-dynamic
Control +	Control +
Trabajo prevención	Prevention work
Global	Global
Dinámico – específico fútbol	Dynamic- specific for football
Intensidad +	Intensity +
Trabajo activación	Activation work

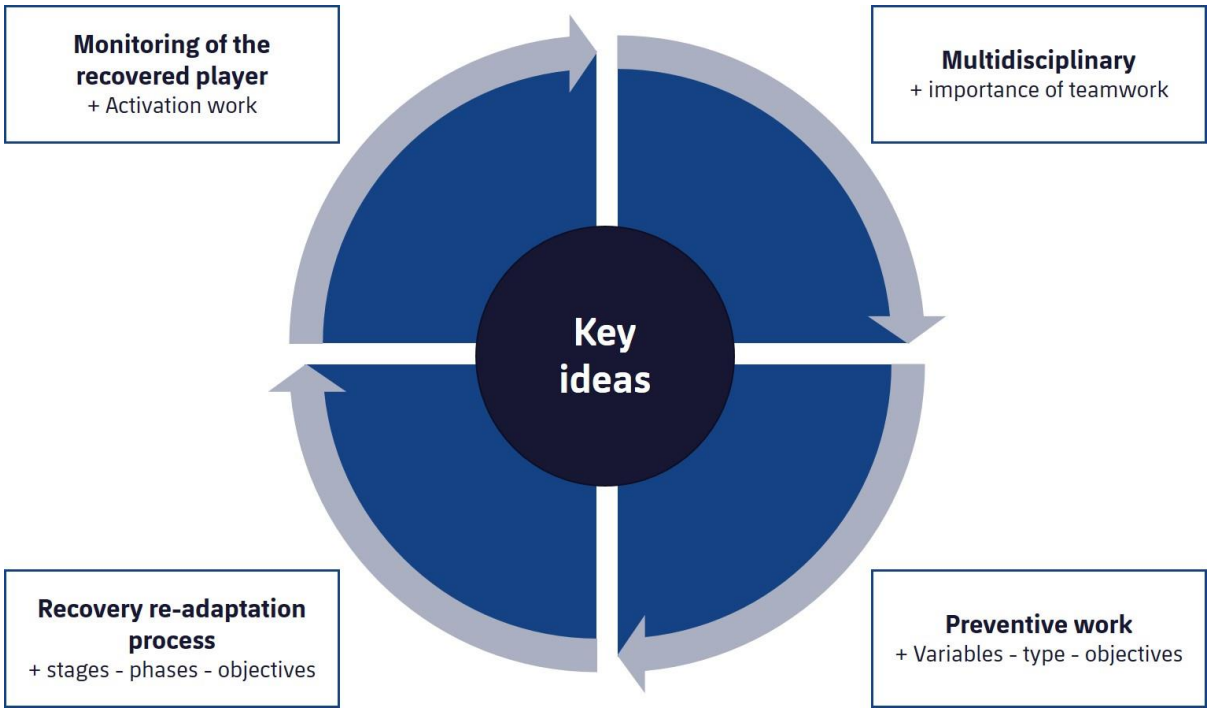
Unit 2.5 Module Conclusion

The recovery processes are highly determined by the type of tissue injured and the characteristics of the player, both at a physiological and psychological level. That's why no injury is the same as another, and no recovery process is identical to another. Due to this complexity, the training of the re-adaptation professional must be continuous. Throughout the study of the module, we have observed the typical work carried out in the re-adaptation area.

The importance of prevention work and its characteristics will help reduce the risk of injury. Also, when an injury occurs, we have learned about the different stages and phases of the recovery and re-adaptation process, which will help us visualise the evolution of the injury. Finally, through the monitoring process, we will improve our prevention work by creating activation exercises, thus completing the circle of the re-adaptation professional's work.

We will take into account pre-menstrual symptoms when adjusting the workload in this type of training.

Image 15: Circle of the Re-adaptation Work



Source: prepared by the authors, Hueso, 2022.

Seguimiento jugadora recuperada	Monitoring of the recovered player
Trabajo activación	Activation work
Proceso de recuperación readaptación	Recovery re-adaptation process
+ etapas – fases- objetivos	+ stages - phases - objectives
Multi-disciplinar	multidisciplinary
+ importancia del trabajo en equipo	+ importance of teamwork
Trabajo preventivo	Preventive work
+ Variables – tipo- objetivos	+ Variables - type - objectives
Ideas claves	Key ideas

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