Dynamic Chiropractic

REHAB / RECOVERY / PHYSIOTHERAPY

Industrial Return-to-Work Factors (Returning the Worker in 20 Pitches or Less)

In an earlier article, we discussed the need to understand the mechanisms of injury and why the functional failure of the musculoskeletal system happens. In this article we move into factors influencing the return of the worker to the workforce. The return to work process is a form of functional rehabilitation and, if done correctly, can minimize the chances for re-injury.

In rehabilitation of the injured worker, one should take into account what is being done in the rehabilitation of the professional athlete, or what we call the "pitch count" process. We will compare introducing an injured worker back into their normal work production with a professional baseball pitcher with a shoulder injury who must return to the normal rotation.

The functional return-to-work process will include alternative duty concepts, limited time modifications and others until the worker has totally recovered to resume full-time work with no restrictions. In the major leagues, injured pitchers are put on a pitch count after initial rehabilitation to reintroduce their injured arms back into the performance of throwing pitches. When introducing an injured worker back into the workforce, a similar pattern could be performed.

Proper investigation of the injury will assist the physician with successful return-to-work procedures. The following are the initial observations that need to be made and recorded to properly develop a return-to-work functional rehabilitation program:

1. Were faulty mechanisms a contributing factor? (bad pitching form)
2. How long has the injury developed? (degree of shoulder soreness)
3. Any changes in the work environment? (cold nights/hot days)
4. Working more hours? (extra innings)
5. Any changes in the work schedule or days off? (deconditioning period)
6. How long has the worker been off normal duty? (deconditioning factors)

1. Were faulty mechanisms a contributing factor? (bad pitching)

The history of the mechanisms of injury will assist in treatment of the condition, but the information is also important in the functional rehabilitation of the patient. If the worker has poor or faulty mechanisms in work postures or work motion, the chances for re-injury are greater. If a pitcher has poor form, returning him after a successful treatment program only sets him up to fail again. The functional rehabilitation will have to take into account the proper training of the worker and pitcher to properly perform their respective jobs.

2. How long has the injury developed? (degree of shoulder soreness)

In many industries, there is such pressure for "no lost time injuries" that employees will not report minor injuries. Only when the injury becomes debilitating or the worker can no longer function will they report the injury. The functional return to work procedures will have to process in a potentially longer rehabilitation schedule or extended limited time restrictions to allow the damaged tissue to properly repair.

3. Any changes in the work environment? (cold nights/hot days)

While the night and day temperatures relate to the baseball pitcher, the temperature in a factory or office can fluctuate during a work shift. This factor is generally overlooked, but could affect the repair of the injured tissues. The physician should investigate this factor and make any determinations or changes in the planned return-to-work restrictions.

4. Working more hours? (extra innings)

The tissues in the body have a failure point in which the stress or work overcomes and exceeds the appropriate or necessary rest period. We have found that the initial overall condition of the worker is a factor and will generally affect the recovery time of tissue repair after injury. The majority of injuries have been documented to occur during the initial hours of work, after an extended break or when additional hours have been added to the work schedule. Muscles can be conditioned to function for longer periods of time with less failure, but as we age the ability to increase this conditioning declines. Unfortunately, what positive conditioning that is achieved is lost quicker when the exercises or work is decreased. The physician needs to evaluate any changes or anticipated changes in the employee's work schedule that could cause any delays or re-injuries to the repairing tissue. You may have to modify or extend the limited time restrictions or functional work restrictions to allow for proper healing.

5. Any changes in the work schedule or days off? (deconditioning period)

As discussed in the last section, muscle conditioning or function« failure point. When activity, exercise, work, or whatever has assisted the worker or pitcher to obtain the level of current conditioning is changed, deconditioning can occur. Again, age is a major factor. We decondition quicker as we age. Other factors such as poor eating habits, smoking and lack of sleep will exacerbate the problem.

6. How long has the worker been off normal duty? (deconditioning factors)

Many employees seek different forms of medical care before landing in your office. They may have been off work for weeks or months prior to starting care with you. You need to evaluate the amount of deconditioning that has occurred in the patient and plan your return to work program accordingly.

We know that deconditioning takes place at different rates in different people. The poorer the initial condition of an individual, the faster the deconditioning will occur. To introduce an injured worker back into their work environment, as you would with a pitcher with a shoulder injury, begin with light or alternative duties that allow the injury to heal. When the injured area can withstand medium limited-time work, the worker is gradually transferred to this mode and monitored for progress or any exacerbations. When the worker can handle the next level, move them to full speed on the job, but limit the time on the job to assist with reconditioning. Many times, medical support in the form of ice or mini-breaks are necessary to prevent re-injury to the worker.

In the major leagues, pitchers are put on a pitch count after being introduced to their pitching position. The count is determined on the degree of injury and the current repair level of the injured

tissues. As in pitching, some jobs take more time for conditioning. The higher the physical demand of the job, the greater the effect being off the job will have on the employee.

On reintroducing a worker back to work, if the patient cannot handle the weight or physical portion of a job, you still want to reproduce the motion of the job and add what physical force the patient can handle. In the pitching example, the athlete is instructed to move the arm through the motion of pitching 10 times, 10-12 times per day. Add a ball in the motion to increase the acceleration until the athlete can start light throwing on the way to normal activity, making sure the limits of healing of the body part are not overextended to cause exacerbations. Similarly in the work force, the motion of the job could be reproduced by the worker until they can add any additional weights of product or tools until the affected tissue is able to handle the full load.

There is one additional factor to be aware of in the return to work process. When employees return to the job, they may be deconditioned to the job, but they have not forgotten how to do the« rates the same or similar to the rate performed before the injury. This increased production will generally be faster than the projected functional return to work program. Specific attention needs to be placed on this factor, and the industrial personnel needs to monitor the return-to-work restrictions for time and function closely to properly introduce the worker back to the job.

All of the above listed factors can, if ignored, have a negative effect on the overall picture of the patient's recovery. However, if followed correctly, they can greatly increase the ability to return workers back to work successfully.

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