

## FIRST-AID IN HANDBALL INJURIES

**Dr. Vinod V. Kapile**

Director of Physical Education and Sports.  
Shri. Dr. R. G. Rathod Arts And Science College  
Murtizapur,  
Akola

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**Abstract:** *The aim of this study is to highlight the main risk/injuries involved in the handball game and the first-aid for the related injuries. The study overview the Amravti University Inter-collegiate Men/Women Handball matches. Handball is a popular game among the youths of the Maharashtra and Jammu & Kashmir region. Incidences of injuries in a handball match are higher, due to the high excitement level, high competition level and mostly in one-on-one situation in the match. In handball matches the traumatic blow was the main cause for the most of the injuries occurring in handball matches. Fracture and Contusion was the most frequent injuries. Whenever an injury happens during the match, being a helpless witness to an emergency situation probably get worse the situation. Only a small numbers of players or coaches are known to give proper First-aid to a specific injury. So, this is why the basic knowledge of the first-aid is necessary for all players and coaches.*

**Keywords:** *Handball, Injuries, First-Aid.*

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### Introduction:

First-aid is the treatment suggested for acute injuries. It is the initial treatment given to an injured or ill person/player by other person. Accidents can occur to anyone at any time in the playfield. Everyone is prone to injury. The injury may be mortal for the injured player, if first-aid is not provided well in time. The proper knowledge about management of injuries is known as First-aid. Handball is a game of rapid movements and sudden direction changes, jumps, agility, landing, etc. The players continuously switching from offensive play to defensive play in which the physical contact between the players occurs regularly during the match. The most occurring injuries in a handball matches are given below:-

- Ankle sprain.
- Knee sprain.
- Shoulder Dislocation.
- Finger injury (Sprain, Fracture).
- Muscle Strain in Groin and Thigh.

### First-Aid:

First-aid is the immediate and temporary care/help that you give to a person who is injured or who becomes suddenly ill to:-

- Preserve life
- Prevent the condition from becoming worse

- Promote recovery

Knowledge of first-aid is precious for both players and coaches. It permit you to aid the player who get injured during the match until the help arrives. For giving the proper first-aid treatment we have to follow the principles of first-aid:-

- Immediate aid.
- Think about ABC (Air, Breathing, Circulation)
- Stop bleeding.
- Crowd kept away.
- Wrap the injured part in cloth or blanket.
- Sympathetic attitude.
- Fluids should not be given to the unconscious person.
- Medical aid.

First-aid to any muscle injury follows the PRICE treatment.

- **P:** Protection
- **R:** Rest
- **I:** Icing
- **C:** Compression
- **E:** Elevation

The PRICE treatment should be given for first 2-3 days immediately after the injury. The objective of PRICE treatment is to reduce the swelling of injured part, prevent further injury and reduced pain.

### **Ankle Sprain and Knee Sprain:**

The one of the most frequent injury in the handball game is the sprained ankle and sprained knee. Ankle/knee sprain commonly occurs due to awkwardly landing, stopping, jumping, quickly turning. Whereby the foot/knee is twisted outward and inward, which may cause the partially or completely tearing of the ankle/knee ligament. The torn of the tissues cause tenderness, swelling and pain on the site of injury.

### **First-Aid Treatment:**

- Stop the play when injury occurs. Help the player to sit down and rest the leg.
- Immediately apply cold compression over the injured part for 10-20 min. with 10 min. interval to reduced pain and swelling. Do not apply ice directly onto the skin, apply ice bag with a wrap of cloth. Wrap the ankle/knee with the compression bandage over the injured part. Make sure that the bandage is not too tight.
- The injured part must be elevated/raise above the level of heart.
- After 48 hours give gentle massage to the injured part to reduce the swelling and to relief pain.

### **Shoulder Dislocation:**

Dislocation is a joint injury in which the bone is displaced from its original position. Dislocation is caused due to direct impact/blow over the joint. During the handball match whenever the throwing arm of the offensive player blocked by the defensive player of the team. This direct impact/blow to the shoulder result in dislocation of the shoulder joint. And some time shoulder dislocation also resulted due to the bad fall of the player over the shoulder joint.

**First-Aid Treatment:**

- Do not try to force the injured part to move.
- Keep the victim in a comfortable position. Placed some cushion or pillow between upper arm and chest.
- For preventing further movement, provide support or wrap the injured part with the upper body or put the affected arm in a sling with elbow at 90 degree angle.
- Give 'Cryotherapy' (cold compression) to the affected part for 6-10 times for reduce the swelling, reduce internal bleeding and get relief from pain.

**Finger Injury:**

Finger injury is also a common injury in a handball game. This injury is occur whenever the ball hits an outstretched finger awkwardly or due to the bad fall on the fingers. The direct blow to the fingers result in finger sprain or fracture in a finger. The finger start swelling and becoming painful.

**First-Aid Treatment:-**

- Give the first-aid by following the principles of PRICE just after the injury occur.
- Firstly immobilize the injured finger by taping the injured finger with the adjacent finger and also to give support to the injured finger.
- Apply ice packs and cold compression for reduce the swelling and pain.
- After giving first-aid send the victim for x-rays and for further treatment.

**Strain in Groin and Thigh:**

Strain is the injury of the muscles which is caused by the over-stretch and over-used of the muscles. Strain in groin and thighs occur whenever there is a tearing of the adductor muscles of the thigh or the thigh muscles get damaged. This injury occurs due to the quick movements such as running, changing direction, jumping, awkwardly landing, etc. due to the hyperextension of the joint.

**First-Aid Treatment:**

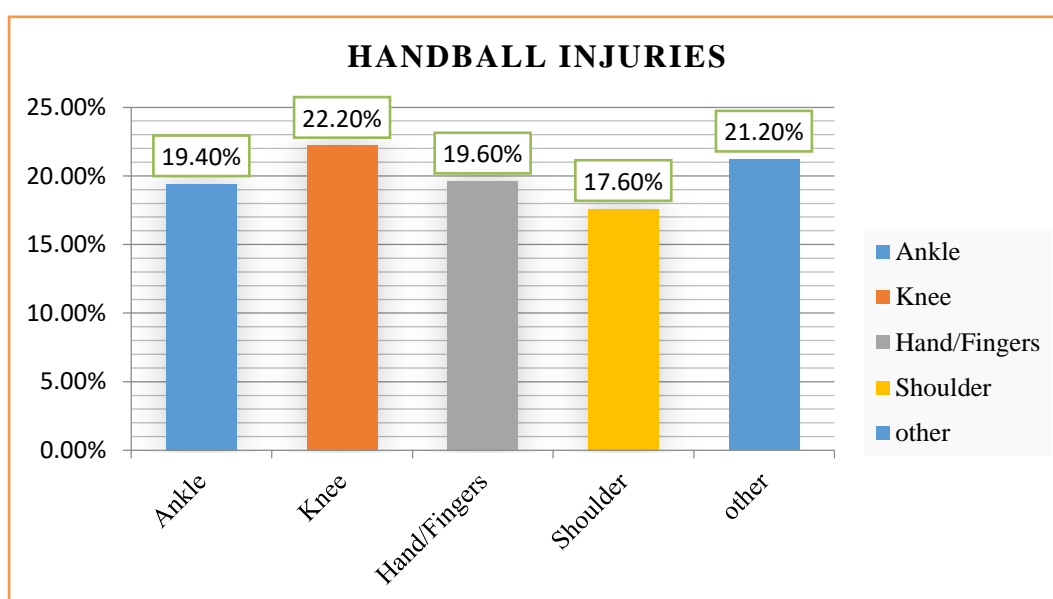
- Stop the play and asked the injured player to sit down and completely restrict the movement of the injured part.
- Follow up the principles of PRICE.
- Rest the injured part until the pain reduced and immediately apply cold compression with an ice-pack wrap in a towel and place it over the injured part.

- Elevate the injured part above the level of heart to reduce the blood flow towards the injured part.

### Methodology:

In this study the Descriptive method of study is used. This study overview the Amravati University Inter-collegiate Handball matches of Men/Women. By using the observation method and by observing all the matches, I observe that the chances of occurring injuries are about 20-30% in a Handball match. Near about 56% of the injuries were strain and sprain and only 14% chances of fractures. Most of the fractures were seen in hand, fingers and ribcage.

**Graphical representation showing that the chances of occurring injury in a particular part of the body during the Handball match**



### Conclusion:

Above study shows that handball is a game of physical and dynamic contact with higher chances of risk of injuries. There is a lot of incidence of injuries occur in a handball matches some are acute and some are chronic injuries. So a well experienced personal should be present during the matches of handball. Because if any injury happen during the match the adequate first-aid treatment should be given to the injured player for preserving life and preventing the injury to become worse.

### References:

- Fagerli, Unn-Merete &Lereim, I &Sahlin, Y. (1990). [Injuries in handball players]. Tidsskrift for den Norske lægeforening: tidsskrift for praktiskmedicin, nyrække. 110. 475-8.
- Luig P, Henke T (2010) Injury prevention in team handball compilation and evaluation of prevention measures in European countries Injury Prevention 16:A224.
- P. Luig& T. Henke, Inventory of the burden of handball injuries, existing prevention measures and safety promotion strategies, Ruhr University, Bochum, March 2010