
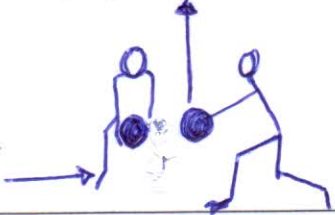

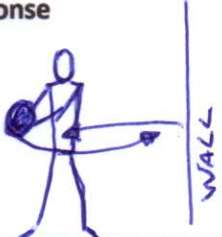


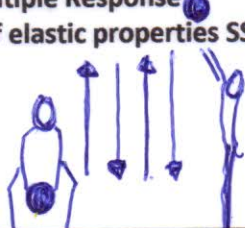


November 2015, Physical Conditioning - Multi Throws Practical video 2
Bracing trunk and transferring force from lower to upper body

| EXERCISE | Key Points |
|--|---|
| <p>Vertical Toss - (Countermovement) Double support Sit hips back on heels Ball travels vertically up</p>  | <p>Flex hip-knee-ankle whilst keeping heels on the ground during descent. Sit hips back on heels. Explosively extend hip-knees-ankles for ascent. Dorsiflex feet immediately after leaving ground. Let ball drop to floor and then repeat exercise.</p> |
| <p>Vertical Toss - Unilateral (single leg from semi-squat) Single leg stance Heels on ground</p> <p>1 leg</p>  | <p>Assume semi-squat on one leg and brace trunk. Heel stance on ground and sit hips back. Rapid extension of hips-knees-ankles. Focus on tossing ball directly upwards with straight arms. Maintain knee over toes throughout. Let ball drop to floor and repeat.</p> |
| <p>Underarm Forwards Throw - (Bilateral Countermovement) Sit hips back Straight back Good release speed</p>  | <p>Start by standing feet shoulder width apart and drop into squat position. Flex hips-knees-ankles with forward torso lean. Explosively extend hip-knee-ankle as torso becomes more upright.</p> |
| <p>Side Throw - Multiple Response (Countermovement) Throw to wall Catch and return Explosive Uses SSC</p>  | <p>Evenly distribute weight through mid-foot. Rotate trunk then unwind and release ball HORIZONTALLY. Hips should remain forwards during execution. Keep arms extended and focus on FAST release. Makes use of the elastic properties to get a SSC cycle.</p> |
| <p>Overhead Forwards Throw - Multiple Response (Bilateral Stance) Feet shoulder width apart Knees slightly flexed</p>  | <p>Feet shoulder width apart and knees slightly flexed. Start with ball overhead and draw shoulder blades down. 'Whip' the torso into flexion and extend elbows. Release ball in front of head as in a 'throw in'.</p> |
| <p>Neider Throw - Single Response Chest Pass Feet shoulder width apart Release ball at force 45 degrees Throw once then catch And repeat.</p>  | <p>Ball against chest. Stand upright so trunk remains stable. Explosive triple extension followed by elbows to release the ball at a 45 degree angle. Trying to produce ROF (rate of force development).</p> |
| <p>Vertical Toss - Multiple Response Makes good use of elastic properties SSC Throw up, catch Throw again.</p>  | <p>Flex hips-knees-ankles whilst keeping heels on the ground during descent. Explosively extend hips-knees-ankles for ascent. Toss ball in a vertical path for height with straight arms. Catch ball maintaining strong posture and repeat</p> |

November 2015

Section 23 – SPE Training Methods – Part 2 Types of Throws and their uses

| Type of Throw | Primary Focus | Other Areas of Physical Development |
|--|---|--|
| Asymmetric Throws <ul style="list-style-type: none">• Single Leg• Single Arm | Balance and proprioception i.e. muscular and fascia (non-muscular connective tissue) conditioning round joints. | Diagonal truck and fascia patterning. Trunk SSC |
| Stability Throws | Isometric trunk strength and stability (trunk stability through holding trunk 'still' symmetrically). | Specific joint conditioning e.g. shoulders external rotation. |
| Mutli-throws (partner or rebound throws) | Stretch-shortening cycle. | Muscular endurance. Metabolic conditioning. Tissue conditioning (around joints). |
| Throws with Pre- and Post-Movements | Conservation of momentum i.e. efficient transfer of energy Generation of power. | Coordination (see section 1). Movement efficiency. |
| High Intensity Throws | Explosive triple extension. | Rate of force development. |

November 2015

BA Event Group Jumps Module - SPE training methods: Multiple throws

Understanding the Hierarchy and Competency Scale of Throwing

| | |
|---|---|
| High intensity throws | <ul style="list-style-type: none">• Explosive triple extension throws• High intensity throwing |
| Throws with pre and post - movement | <ul style="list-style-type: none">• Throws with steps and shuffles• Throws with jumps• Throws with Sprints• Throws with bounds |
| Multiple throws (force absorption and generation) | <ul style="list-style-type: none">• Partner throws• Wall throws• Slams, chops• Multi directional and rotational |
| Stability Throws (Trunk and joint conditioning) | <ul style="list-style-type: none">• Standing throws• Single leg throws• Kneeling half kneeling, seated throws• Specific shoulder conditioning |
| Underpinning movements | <ul style="list-style-type: none">• Shoulder stability and control• Squat patterns• Lunge patterns• Rotational and diagonal movement of trunk• Proprioceptive work and drills |

An athlete must 'earn the right' to progress up the hierarchy by achieving competence in each movement.

Example, within a 15 minute session,

The athlete begins with **Underpinning Movements** (5 mins) and several exercises.

Move to **Stability Throws** (7 mins)

Conclude - integrate the concepts learned in the first 12 minutes into a full throw with a light medicine ball (3mins).

After several weeks of practice the coach no longer needs to revisit the underpinning movements and begins the session instead with:

stability throws (5 mins)

Multiple throws (7 mins)

Finishes by challenging the athlete to integrate pre and post movements into their repertoire (3 mins).