Call #14

Behind the Scenes @ The Ballet Blog

Hip Popping, Clicking and Grinding, and other Hip Related Questions
Hip Popping Q&A

The following question came up on the Facebook group for all teachers who have done the Level One course. I paused on answering it, several times, as I couldn't think of how to answer it succinctly, yet completely. I will attempt to answer it in detail here today, and then try to distil this down for easy access, but it is with issues like this that the detail is important.

The question was:

“Are there any recommendations for dancers struggling with hips popping? Most commonly this happens when going for a high développé or grand battement to the side but also recently I had someone ask about consistent popping in a grand plié in second, particularly at the beginning of the day. What areas might need to be strengthened or stretched/massaged? Are there any specific exercises you would recommend?”

Now, I have an entire day (soon to be two day) Level Two course on Understanding and Managing Hip Injuries, but I will try and go through each of the common possibilities and how to approach them today.

Click on any bold and underlined links to be taken to the video or related article for further detail on each technique or explanation. Reviewing the Anatomy of the Hip section of the portal may help orientate you in regards to the various structures if this is new to you.
There are many different hip sounds

Higher pitched clicking in the top/front/side of the hip with leg circles

A deeper click or flicking feeling with a Grand Battement a la second, or when extending the legs in Pilates based floor exercises

A deep clunk when in a grand plié in second, or when stretching in a warm up

Grinding and gravel-like sensation when performing hip circles

Snapping, flicking or clunking on the outside of the hip when sitting into one hip

Any others?

Dealing with the issue while it is still “just” a sound can help prevent more major hip issues in dancers
Higher pitched clicking at the top of the hip

Often located at the top/front/side of the hip and noticed when doing standing hip circles when warming up, or during adage

Often due to TFL (Tensor Fascia Latae) or the top of Rectus Femoris

TFL tension caused by hitching the hip of the working leg in retiré, often due to poor lateral stability on the supporting leg, lack of adductor control, or weak inner range hamstrings

Rectus Femoris will often be chronically tight if overused in adage due to a lack of deep rotation, and poor spinal stability

Over-recruitment of Psoas Major to stabilise the spine results in reduced function as a hip flexor, thereby increasing the load on TFL and RF in adage

Rectus Femoris will often be very restricted when assessing the Thomas Test
Options for resolution

- **Tight TFL**: Standing Hip Flexor Mobilisers & Pretzel Stretch
- **Tight Rectus Femoris**: Rectus Femoris Mobiliser on Chair
- **Poor lateral stability on the supporting leg**: Standing Leg Turnout Sequence or Wall Press Exercise
- **Weak inner range hamstrings**: Hamstring Activation Sequence
- **Poor spinal stability**: 6 D Breathing, Tucks and Tilts, Micro Tucks and tilts, 4 Point Sit Backs
- **Reduced function of Psoas Major as a hip flexor**: Hip Suck in Lying or Standing
- **Tight Rectus Femoris in the Thomas Test**: Cupping for whole front of thigh
- **Leg Abducting in the Thomas Test**: Deep inner thigh endurance with Cushion Squeezes
A deeper click with a grand battement

This is felt a little lower than the previous click, and is often palpable when throwing the leg to second.

Also often happens when extending the legs in Pilates style exercises.

Due to a chronically thickened tendon moving over the AIIS/Rectus Femoris insertion.

Likely due to poor spinal stability and increased load in Psoas Major.

The dancer usually attempts to “stretch it out” but this often makes it worse.

Advise them against repeatedly clicking to demonstrate, even if it is not sore, as the repeated friction will usually develop into pain.

M. Psoas major

M. Iliacus

M. Iliopsoas
Options for resolution

- **Chronically Over Recruited Psoas Major**
  - Sitting Posture & Standing Posture

- **Placement of pelvis**
  - Work on minute pelvic rotation to change position of AIIS

- **Reduced function of Psoas Major and Iliacus as hip flexors**
  - Hip Suck in Lying or Standing

- **Overstretching Hip Flexors**
  - QL Side Stretch often gives relief without over stretching

- **Restricted Rotation in second**
  - Assess hip in detail to determine restriction

- **Lack of rotational control a la second**
  - Retiré in Side Lying, or Prep for Pirouette exercise

- **“Tight Psoas”**
  - Avoid any strong sustained stretches, cracking the hips or any trigger point work unless by very well trained therapist - should be PAIN FREE

- **Poor spinal stability**
  - 6 D Breathing, Tucks and Tilts, Micro Tucks and tilts, 4 Point Sit Backs
A deep clunk in a Grande Plié

This sound often develops in students who ‘must’ crack their hips before class.

Indicate a deep instability in the hip joint.

Often very restricted in the back of the capsule, due to ++ work in turnout.

Front of the capsule is often overstretched.

May involve the Labrum if chronic, or a point of trauma.

While forcefully cracking it will feel better initially, will lead to long term instability.
Options for resolution

Desire to crack: Find a mobiliser that releases the pressure, without the crack - Try the QL Stretch

Instability in the hip joint: Avoid over stretching, focus on stability

Restricted back of hip: Piriformis Release with Tennis Ball, Internal Rotation Mobiliser & Obturator Internus Releases

Overstretched front of capsule: Hip Position, Mini Squat & Hip Suck

Poor Standing Posture: Grade One Core Stability

Poor Sitting Posture: Dynamic tape may help initially

Unconscious Cracking: Build endurance of deep inner thigh - Cushion Squeezes

Sinking into hip: Dynamic taping for awareness
Taping for awareness

Various taping techniques may be employed to offload the damaged tissues.

Dynamic tape can be used in overlapping webs to dramatically reduce the load on the lateral and anterior hip in acute cases.

However, I find that the most effective techniques are those using dynamic tape to help facilitate correct postural control through proprioceptive reminders.

One of the best methods is using a sling to help bring the rib cage forward in relationship to the pelvis when the dancers habitually sink into the hips.

Transverse straps to facilitate the low abdomen are also very effective at providing support to encourage natural breathing.
Grinding in the hip with Hip Circles

May be due to mild fraying of the labrum or degeneration of the joint surfaces.

Often develops over time in hips with lots of natural range, but little control.

May also happen in those who struggle with range and force themselves into deeper range than their anatomy allows.

May also be due to chronic synovitis of the capsule.

Dancers often do not like taking knees to chest or crossing the mid line with the knee.

Is a chronic issue, so correcting all of the contributing factors may take a while - no quick fix.

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Options for resolution

- **Chronic Synovitis** → **Standing Posture Correction**

- **Poor Gluteal Activation** → **Gait analysis and correction**

- **Poor lateral stability on the supporting leg with Transfer of Weight** → **Standing Leg Turnout Sequence**, or Wall Press Exercise

- **Labral Tear** → Manage conservatively - reduce load on it

- **Pain with compression at the front of the hip** → **Pinching in the groin sequence - Hip Position, Mini Squat, Offset Squat, Iliacus Release**

- **Ineffective Iliacus activation for deep hip flexion** → **Hip Suck in Lying or Standing**

- **Tight back of hip** → **Piriformis Release with Tennis Ball, Internal Rotation Mobiliser & Obturator Internus Releases**

- **Tucking in Grand Plié** → **Wall Plié**
Snapping or clunking on the outside of the hip

Often termed “Snapping Hip”

Tension in Lateral Line causes friction when tensioned over Greater Trochanter

Think more about the entire Lateral Line rather than focussing on the ITB

Often due to poor hip stability, in standing and in gait

Check ribcage and breathing, as this is often involved

Cupping can work well to relieve tension
Options for resolution

- **Tight Lateral Line**: Lateral Line Mobiliser & Cupping for Gluteus Maximus and whole lateral thigh
- **Tight Lateral Hip**: Sequence for tension in Lateral Hip
- **Tension down by knee**: Cupping and Massage for peroneals - assess foot mobility and control
- **Poor Standing Leg Turnout, overuse of Gluteus Medius**: Turnout in Retiré with Band & Plié at the wall
- **Poor inner thigh endurance**: Cushion Squeezes
- **Uneven weight distribution in standing**: Assess James Bond or 3 D Calf Mobiliser
- **Poor Dynamic Hip Stability**: Dynamic Lunge Sequence
- **Restriction in rib cage or neck**: 6 D Breathing and Thoracic Mobilisers
Other Noises?
Assessment:

In any hip issue going through the hip assessment from the Level One course will give you so much information about this particular student’s strengths, weaknesses and restrictions. Designing a customised program based on the results of this assessment will be far more effective than a generic program based on their symptoms.

**Basic Hip Assessment:**

- Basic standing posture
- Forward bend - watch low back
- Grade One Core Stability - Supine, Side Lying, 4 point, sitting and standing
- Standing Transfers

**Basic Hip Assessment:**

- External Rotation at 90 degrees
- Internal Rotation at 90 degrees
- Abduction at 90 degrees
- FABERS test
- Quadrant Test
- Standing Leg Turnout, Passive and Active
- Thomas Test

**Hip Assessment PDF**
The Big 6

- The Breath
- The Gut
- The Spine
- Stability of the Hip
- Standing Posture
- Gait
Good questions to ask dancers with hip issues

The Breath
• Do you have Asthma? Or any other breathing issues?
• Do you get breathless when dancing?
• Do you often get hiccups?

The Gut
• Do you have any food intolerances or other digestive issues?
• Do you ever get bloating or stomach cramps?
• How often do you get strong menstrual pain?
• Have you ever had abdominal surgery?
• Do you frequently get diarrhoea or constipation?

The Spine
• How often do you get back pain?
• Is it worse when dancing or when sitting or standing still?
• How often do you crack your back? Does it ever happen without trying to crack it?
• Do you have a naturally flexible back?
• Is it hard to sequence a roll down at the wall, or on the floor?

Stability of the Hip
• How often do your hips make noises? Do they Crack, Pop, Click, Clunk or Grind?
• Is it hard to balance on one leg? Is it easier to balance in parallel or turnout?
Summary:

- While the location and sound of the noise can give you some clues, assessment is vital.
- There are multiple contributing factors to all of the common hip complaints.
- Good segmental spinal stability is essential to developing good hip control.
- There may be multiple other factors influencing this.
- Make sure to seek the help of a qualified health professional when it becomes out of your scope.
- Standing and sitting posture are major factors.
- Make sure they do not use their sound as a party trick!
Submit Your Questions!

Make sure that your get your questions in for our next call. Nothing is too simple or complex!

These calls are designed to help you navigate your way through all the content and jump to the tests and exercises you need quickly.

Submit a Question

Request a Case Study

Give feedback on this call