4 Oct 2022
Note to reader/user:
This template was constructed as a teaching tool. Any documentation that you use for your own clinical work should reflect your own approach, assessment and professional judgement. ***Please modify (or disregard) any element of this template as is relevant for you and your practice.*** *This template is in no way intended to replace your clinical judgement.*

SOAP for ACUTE low back pain

S/

Patient presents with complaint of low back pain

ONSET / DURATION:
Pain started [date]
Has never had this pain before // had previous similar incident on [date]. Previous incident lasted [days/week], resolved with [time / exercise / "muscle relaxants" / Tylenol / NSAIDS / chiro / massage]
Pain has been same / worse / better since onset

PRECIPATING EVENT
Episode of heavy lifting / yard work / housework
Return to sports / physical activity
Long period of being sedentary [specify (e.g. air travel, viral illness and staying in bed)]
Specific movement that caused an instant "tweak" to back
MVA or other trauma *(**note should use different investigative approach than this one)*
No specific event, developed over a few days

LOCATION:
Is present on R / L / both sides
Points to painful area at [describe location]

CHARACTER:
Sharp
Dull
Radiates to leg / buttock
Associated numbness / tingling
Other features

AGGRAVATING:
Pain is made worse by
Lying down
Sitting
Standing
Walking
Twisting torso (e.g. getting in and out of car)
Bending torso forward (e.g. putting on socks)

Pain is worse in
Morning
Mid day
End of day

Functional impairments:
Ok to toilet self
Ok to dress self
Unable to / Ok to attend to all household duties / unable to attend to
Unable to / Ok to perform all work activities
Unable to / Ok to participate in usual "fun" activites
Other concerns about fxn: none

ALLEVIATING
Pain is made BETTER by
Position change – Lying is best // sitting is best // standing is best
Heat wrap
Cold pack
Other

BEDREST / DECREASED ACTIVITY
Has been staying in bed – usual amt of time // less than usual // way more than usual
Has maintained or increased exercise regime – yes // has not tried due to pain and worries it would "make it worse"

Has not tried any pharma treatments
HAS ALREADY TRIED
Tylenol (at least 500 mg TID x 1 day) – no relief // some relief // good relief
PO NSAIDS (at least 200mg TID x 1 days) – no relief // some relief // good relief
Topical NSAIDS [which one] – no relief // some relief // good relief
OTC robaxacet– no relief // some relief // good relief
Cyclobenzaprine– no relief // some relief // good relief

Opioids [which one and how much] – no relief // some relief // good relief

MANUAL THERAPIES
Massage – no relief // some relief // good relief
Chiro– no relief // some relief // good relief
Physio– no relief // some relief // good relief
Other

RED FLAGS:
*(**note, if yes to any of these items, should use different investigative approach than the one presented in this template)*
No Fever
No Night Sweats
No Weight loss
No History of cancer
No Chronic use of systemic corticosteroids
No Regular use of injectable drugs (where drugs may be poisoned or otherwise tainted)
No Features of cauda equina (bowel or bladder incontinence or acute onset ED)
No loss of muscle strength reported, including no foot drop
Not a "First ever" episode of back pain if over age 50 (especially if over age 65)

Patient well known to me and I have considered their past medical history, as is documented in this chart.
Patient is not previously known to me, have collected additional information about their health history (past medical history incl chronic conditions, usual medications, physical activity, tobacco, alcohol and drug use.

FIFE:
Patient is worried that:
Patient hopes today that I can help them by:

O/

Patient able to walk comfortably to exam room // Patient has marked antalgic gait to exam room
Patient waiting comfortably in exam room // Patient visibly uncomfortable when I enter the exam room

Standing
forward bend – no pain // pain in area described above // other description of pain
backward bend – no pain // pain in area described above // other description of pain
twist to right and left – no pain // pain in area described above // other description of pain
toe walk – OK, no sign of S1 weakness // unable to do, concerning for S1 weakness
heel walk – OK, no sign of L5 weakness // unable to do, concerning for L5 weakness
squat down and up – no pain // pain in area described above // other description of pain
palpation of each vertebra spine, for pain – no pain // pain in area described above // other description of pain
palpation of SI joints – no pain // pain in area described above // other description of pain

Seated on exam table
NORMAL knee and ankle reflexes
seated straight leg raise – no pain // pain in area described above // other description of pain

Supine
lower leg and feet sensation - normal and equal bilaterally // abnormality noted [describe]

L4 Motor Exam - normal and equal bilaterally // abnormality noted [describe]
[L4 Motor Exam = patient slightly bend the knee and kick out as you keep pressure against the leg. Be sure to compare both sides to see if one side has weakness relative to the other.]

L5 Motor Exam - normal and equal bilaterally // abnormality noted [describe]
[L5 strength exam, hold pressure over the large toes and ask the patient to dorsiflex the big toes and foot towards up. Compare both sides for relative weakness]

S1 Motor Exam- normal and equal bilaterally // abnormality noted [describe]
[S1 strength, hold pressure under both feet and ask the patient to plantarflex the foot down. Compare both sides for relative weakness.]

passive straight leg raise - normal and equal bilaterally // abnormality noted [describe]

passive internal and external rotation w knees bent - normal and equal bilaterally // abnormality noted [describe]

[Back exam reference: https://stanfordmedicine25.stanford.edu/the25/BackExam.html]

A/

Most likely diagnosis is non-specific back pain

P/

Reviewed that:
-pain is usually worst in the first week
-gets better with regular movement and potentially increased exercise, as opposed to prolonged rest
-can be made worse by psychosocial stressors, such as concerns about work, money and relationships
-heat or cold can be helpful
-imaging is not helpful at this time, and has not been found to help reduce time to return to function and has been linked to harms like unneeded procedures.

NON PHARMA - EXERCISE
-Increase their physical activity, about 2/3 people who do will decrease their *chronic* back pain, and this likely applies to acute pain as well
-emphasized that all activity counts!
-suggested using a physical activity tracker (like a smart watch) and adding 1000-2000 steps a day/week until they reach 10-15k/day. If they don't have access to a smart watch, add 10-15 minutes of walking per day until up to 75-90 minutes per day.
-provided an exercise prescription
https://www.rxfiles.ca/RxFiles/uploads/documents/Exercise-RxFiles-Rx.pdf

NON PHARMA – HEAT and MANUAL
-advised that there is reasonable evidence to try HEAT WRAPS, or a heating pad
-advised that there is reasonable evidence to try manual therapies such as physio, massage, if they are able to afford it or have benefits that cover it.
-acupuncture may help some, but has less convincing evidence, unlikely to cause harm

PHARMA
Options and evidence reviewed, including:
-A drug "working" in a trial usually means a reduction of >=1 point on a 10 point scale. Some use 30% change in pain. But none mean that pain will be eliminated.
-All pharma options have potential adverse side effects, including, nausea, dizziness, sedation, constipation. Not all trials report this, the best evidence we have says:
6% drop out from trial due to AE's for topical NSAIDs or capsaicin, up to 27% for opioids
-placebo-compared trials have ~5% rate of drop out for placebo arm

The pharma treatments that have been shown to have benefit, above placebo, for non-specific back pain in the first 4 weeks are:
NSAIDs oral or topical and possibly drugs like cyclobenzaprine, sometimes referred to as a "muscle relaxant", but probably just sedating, which can help you feel better or sleep better

Acetaminophen (Tylenol) may help some people but has less convincing evidence, small doses are unlikely to cause harm

Today, using a shared decision making approach we have decided to:

-take a conservative approach where patient will stay as active as possible, trial OTC NSAIDS (topical or PO), if needed and RTC if gets worse or not markedly better in 2-4 weeks.

OR

-patient's pain is intolerable and they wish to trial:
-Topical NSAIDS – recommended OTC voltaren (~17$/15g)
OR
-oral NSAIDs – recommended 400-600mg ibuprofen TID prn or naproxen 500mg BID prn
OR
a short course of lower dose cyclobenzaprine (e.g. 5mg TID x 20 pills)

OPIOID PRESCRIPTION
-due to the patient's extreme pain and decreased function, and failure of other more conservative approaches to provide adequate relief, we have decided to trial a short course of opioids to alleviate pain enough to resume function and gradually increase activity
-[EXAMPLE ONLY – morphine 5mg, 1-2 tablets po TID PRN x 1-2 days, m = 15 tablets]
-patient aware that nausea, dizziness, constipation are common side effects and should be monitored closely, STOP the drug if side effects not tolerable
-pt aware that this medication will, at best, reduce their pain only slightly and that 27% of people in trials stopped it due to adverse events, and that BEING ACTIVE and trying to get back to usual activities ASAP will help.

-patient is aware that as with most prescribed medications, this one must be kept away from children, and stored in a safe place, and only be taken as prescribed
-pt aware that this is ONLY a short term medication, and they should use as little as possible, and renewals are not expected to be useful

-pt agrees to RTC if pain/dysfxn gets worse or not markedly better in 2-4 weeks.

Handouts and patient references given:
WHY IMAGING NOT NEEDED - Imaging Tests for Low Back Pain: When you need them—and when you don't - https://choosingwiselycanada.org/wp-content/uploads/2017/05/Low-Back-Pain-EN.pdf
EXERCISE PRESCRIPTION - https://www.rxfiles.ca/RxFiles/uploads/documents/Exercise-RxFiles-Rx.pdf
WHAT YOU SHOULD KNOW ABOUT ACUTE LOW BACK PAIN - https://www.cfpc.ca/CFPC/media/Resources/Pain-Management/patient_handout_acute.pdf
PAIN CALCULATOR TOOLS (for chronic pack pain, but may apply for acute): https://pain-calculator.com/treatment/low-back-pain/

References:

Gianola S, et al, ***Effectiveness of treatments for acute and subacute mechanical non-specific low back pain****: a systematic review with network meta-analysis. British Journal of Sports Medicine 2022;56:41-50. http://dx.doi.org/10.1136/bjsports-2020-103596*

PEER systematic review of randomized controlled trials - ***Management of chronic low back pain in primary care***
MR Kolber, et al. Canadian Family Physician Jan 2021, 67 (1) e20-e30; DOI: 10.46747/cfp.6701e20

Chenot JF et al. ***Non-Specific Low Back Pain****. Dtsch Arztebl Int. 2017 Dec 25;114(51-52):883-890. doi: 10.3238/arztebl.2017.0883. PMID: 29321099; PMCID: PMC5769319*

Fatoye, F., et al. ***Real-world incidence and prevalence of low back pain using routinely collected data****. Rheumatol Int 39, 619–626 (2019). https://rdcu.be/cXmj2*

Baker R, Freeman GK, Haggerty JL, Bankart MJ, Nockels KH. ***Primary medical care continuity and patient mortality: a systematic review****. Br J Gen Pract. 2020 Aug 27;70(698):e600-e611. doi: 10.3399/bjgp20X712289. PMID: 32784220.*

Back exam reference: https://stanfordmedicine25.stanford.edu/the25/BackExam.html

Therapeutics Initiative Letters & Webinars
https://www.ti.ubc.ca/2022/07/13/137-physical-activity-is-medicine-prescribe-it/
https://www.ti.ubc.ca/2022/02/27/134-finding-the-lowest-effective-dose-for-non-opioid-analgesics/
https://www.ti.ubc.ca/2021/07/14/131-tramadol/
https://www.ti.ubc.ca/2017/07/24/105-cyclobenzaprine/
https://www.ti.ubc.ca/2000/02/28/treatment-of-pain-in-the-older-patient/
https://www.ti.ubc.ca/2019/11/26/topical-analgesics-video/

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