Backache

CME Editor: Dr Chris Ellis MD, MFGP

Essential CME is a series of topics involving a continuous self learning and appraisal process in family practice for general practitioners, primary care physicians and generalist medical officers.

The five parts to the section are Benchmarks for the Busy GP, South African Rural General Practice, Teaching Old Docs New Tricks, MCQs and Resource section.

Part One is called BENCHMARKS FOR THE BUSY GP. Instead of reading through a long article, a group of GPs will have extracted the important facts on the subject from a general practice perspective.

Part Two will be on SOUTH AFRICAN RURAL GENERAL PRACTICE. It will deal with the issues arising from practice in remote rural clinics. It will be context related to practising in poverty stricken communities and problem orientated to the specific conditions arising from this context.

Part Three is called TEACHING OLD DOCS NEW TRICKS and is a mock oral examination for a postgraduate degree in family medicine.

Part Four will be a self evaluation section by short MULTIPLE CHOICE QUESTIONS (MCQS).

Part Five is a selection of SOURCES OF INFOR-MATION and resources for further reading.

Throughout these sections family practice perspectives and theories will be integrated with the clinical aspects. Obviously this CME section cannot cover all that is "essential" in a prescriptive way but aims to help you revise, stimulate your interest and provide some guideposts.

This is number fourteen in the series and is on BACKACHE.

Part I

Benchmarks for Busy GPs

This section is not a comprehensive review but a short selection of abstracts to help you focus on important aspects of the subject partly in the form of reminders and memory joggers.

A GP with an average list size sees about 50 acute backs per year.

The natural history of these is :

- 80 % recover in 3-4 weeks.
- 80 % of cases have no specific diagnosis made!
- However, nearly 50 % of patients suffer a recurrence within the following 4 years.

The initial contacts or first consultation is often vital to the outcome of backache. A few minutes spent on the history and clinical examination may prevent years of coping with the consequences of illconsidered surgery.

It is difficult to examine the back with total accuracy. Objective signs are few and their significance is often difficult to interpret. We are only provided with one back so there is no "normal side" to compare with.

Backs are best examined with the same routine each time (gait, local signs, movements, neurological etc) and combined with history can provide a reasonably accurate diagnosis in general practice conditions. (For patterns of back pain, examination routines etc see South Contributors to this Section:

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Editor: South African Family Practice. Professor Sam Fehrsen.

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African Family Practice Manual. Part 4. Chronic Illnesses²)

There appears to be little scientific evidence to support many of the treatments in common use for low back pain.

There are few clear guidelines and a lack of consensus on the management of backache.

Many GPs have markedly varying views on the management of low back pain and are often ignorant of existing scientific evidence or are committed to a particular line of treatment or discount the effectiveness of other treatments. (Cherkin et al, 1995)

Low back pain can be divided into three groups :

Group A : Organic Syndromes

- Group B : Non-organic (functional) Syndromes
- Group C : The Chronic Pain Syndrome

80 % of the organic syndromes are made up of the **mechanical stress** (overload) syndrome and spinal instability. (References, Dommisse, 1992; Sher, 1992)

The Mechanical Stress Syndrome

Enter the middle aged worker with the bulging midriff, the Camel and the Castle.

He complains of back pain, which may radiate to the buttock and\or the posterolateral thigh and extend as far as the knee. It is aggravated by movement or activity.

You see that there is a list of the trunk to one side or the other and a painful gait. There is severe paravertebral muscle spasm. Straight leg raising (SLR) may be diminished. X rays are normal or show some slight osteoarthritic changes or disc space narrowing.

The treatment is :

- Bedrest for 7-10 days
- Physiotherapy (ultrasound, laser etc)
- Medication (the 3 A's : Analgesics, Anti-inflammatory agents (NSAIDs) and Antispasmodics)
- Patient education to build muscle strength.

Surprisingly studies have shown little benefit from education (lectures on backs, lifting, exercising etc) on recurrence rates or absences from work for back problems.

To pull or not to pull?

Patients are often admitted to hospital for traction, which is an unassessed form of treatment. The decisionmaking process which leads to admitting a patient to hospital for traction is an interesting one and may be influenced by social circumstances, inability of patient to rest at home, family problems, anxiety state etc. The traction may be on the legs but the most effect may be as "cerebral" traction.

As an addendum here on the decisionmaking process in general practice, **93 factors have been identified which affect our decisions**. These have been grouped into ten categories (e.g the actual health problem, patient expectations, impact of family, other people, doctor work load, resources available, time factors etc) (Essex, 1985; McWhinney, 1989, p.152)

To rest or not to rest?

One study has indicated that there may be no difference in outcome between 2, 5, and 7 days bed rest. Current trends suggest that 2 days may be adequate for mechanical back strain. This has considerable economic implications.

The biokineticist

In the main centres, the biokineticist is a useful member of the team either

at the beginning or with resistant IOD cases and with sports injuries.

The four Bs

Patient education to build muscle strength is, in theory, the cornerstone of preventing recurrence. The Back muscles, the Belly muscles, the Buttock muscles (hip extensors) and the Breathing muscles (intercostals and diaphragm) are the most important.

This exercise programme takes 3 to 4 months and needs follow up and motivation of all parties.

There are several excellent handouts on "How to care for your back", "Do's and Don'ts" etc to try and prevent back injury as well as videos for use in industry.

The camel, the castle, the corpulence and the couch

Education on other risk factors should be carried out in a holistic manner. Smoking has an adverse effect on recovery, Charles Glass increases the corpulence and the couch potato has weak musculature.

These patients must be encouraged to do their back exercises daily. These exercises are combined with a soft type of brace, e.g. medac brace, which is easier to put on than the older ones.

The Do's and Don't of back care must be repeated and emphasised.

The pedantic statements in the above two paragraphs are all very well but very few of these type of patients stick to an exercise programme. Neither do they lose weight and the hanging belly returns to complain of backache. So the answer is...

Degenerative disc disease

Degenerative disc disease is one of the commonest causes of spinal instability.

The patient complains of pain on active movement and on bending forward or sitting for a long time. The condition is milder and less painful than mechanical stress disorder and the patient can usually continue working.

Acute disc herniation is more common in the younger person. With time the disc space narrows, which affects the paravertebral joints leading to secondary osteoarthritis in middle and late age. These osteophytes then impinge on the nerve roots. The chronic aching back is often from osteoarthritis of the paravertebral joints.

Treatment is basically the same as for mechanical stress disorder, but weight reduction and avoidance of sports or work involving bending, twisting, jarring or jumping should be emphasised.

Intervertebral disc herniation.

The patient is commonly 40-45 years old and presents with low back pain and sciatica. The pain is aggravated by coughing, sneezing and bowel movements. There is spasm of the lumbar muscles, often with a list of the body and movements are painful and restricted. The straight leg raising (SLR) test is positive on the effected side in over 90 % of cases, with pain in the buttock\back at less than 70 degrees.

Pathognomonic signs of disc herniation include reproduction of sciatic pain with the SLR test on the opposite side and the presence of calf tenderness when L5 and S1 nerve roots are involved. An absent reflex (e.g. ankle) is also an important sign.

Initial treatment by the general practitioner follows the routine described above. Active physiotherapy is contraindicated in the acute

phase but local pain relieving measures by the physiotherapist are helpful in the acute phase.

The MR scan

Many patients are sent for an MR scan but 21-36 % of asymptomatic patients have herniated discs on magnetic resonance imaging scans. This investigation has a high incidence of false positives and is very expensive and its real use is to localise the disc **after the decision to remove it has been made**.

Nevertheless MR scans may be necessary to confirm definite clinical findings or be used for patients who have not responded to conservative programmes (no relief from pain). Tumours can sometimes be very misleading and can be picked up on MR scan.

Because of the expense of the investigation, one should be able to justify one's reasons.

Criteria for surgery in disc herniation

"The Rule of Five"

- Leg pain more severe than back pain.
- Motor weakness\wasting, myotomal in distribution.
- A positive SLR test followed by a positive bowstring test.
- A positive crossed SLR test.
- The failure to respond at all to conservative treatment applied for not less than 10 days (and preferably much longer).

Indications for emergency surgery

The cauda equina syndrome which causes paralysis or loss of bladder control or bowel control is an indication for emergency surgery.

The Chronic Pain Syndrome

This condition is deeply rooted in the psyche and usually occurs after an injury at work or a failed operation.

They have long standing pain and are often chronically depressed and fail to respond to analgesics.

There may also be a compensation neurosis involved. This is referred to, in the USA, as **"the green poultice syndrome"**, as a hefty wad of green \$ 100 notes applied to the painful back is curative.

This, in fact, may not be so and many feel that the **lump sum of compensation** should be abolished as it causes pressure on the injured work man, delays return to work, increases litigation and is against the long-term interests of the patient. A continuous payment system of compensation with minimum legal involvement is advocated. (Greenough, 1994)

"The pain in the spine stays mainly in the brain"

Waddell's tests are to check for inconsistencies\malingering\nonorganic pain :

- 1. Tenderness that is superficial and not anatomically based. Also sensation loss that is not anatomically based, e.g. glove and stocking anaesthesia.
- 2. Press downwards on the head (simulation test). This only exerts pressure on the neck and should not be felt in the back.
- 3. Distraction Test : while pretending to examine the knee or hip, do an SLR test.
- 4. Overreaction to innocuous stimuli. (Waddell, 1980)

Observation of the patient undressing and more particularly dressing after the examination when lulled into a relaxed mood is also useful. The family practitioner, as he drives home for lunch, is also able to observe the patient mending his roof.

The Postoperative Failed Back Syndrome

"The Dynasty of the Disk"

This is the operation that should not have been done in the first place.

Accuracy of diagnosis is paramount.

Many orthopaedic and neurosurgeons appear unable to wait to undertake back surgery. 95 % of lower back injuries respond to conservative treatment in 8 weeks.

Postoperatively up to 15 % of patients will still have significant disability.

Patients with complete herniation have the best results, especially the patient with acute symptoms.

A second operation only has a 50 % chance of success.

To X ray or not to X ray, that is the question?

The yield from lumbosacral X rays is very low.

Changes of degenerative disease on plain X rays are as common in asymptomatic patients as in patients with backache.

Routine lumbosacral X ray in the absence of suspicious features reveals unexpected disease **in only one occasion in 2500!** (Nachemson, 1976)

Why then are so many patients referred for X rays at great cost in terms of personnel, money, resources and convenience?

The reasons are :

- 1. The insistence of poorly counselled or impatient patients.
- 2. Impatience or ignorance on the part of the doctor.
- 3. The fear that something important may be missed (metastasis, ankylosing spondylitis etc).
- 4. The psychological benefit that patients (and doctors) get from a normal X ray report.

This is one of the conditions that emphasises the difference between investigating patients in general practice and in specialist practice. It is reasonable, for instance, for X rays to be part of the routine examination for an orthopaedic specialist, who almost by job definition must "exclude" all possibilities.

Groups at risk, such as TB spine in Black patients, need to have X rays at an early stage in the decision-making process.

Another group is children and teenagers. Always take backache in a child seriously.

Curing the patient by sending him back to work

Simply returning to work has been found to be a successful therapeutic option for mechanical backache.

Backs may be inappropriately overprotected. Prolonged disuse of the spinal muscles results in chronic pain.

"A chronic sufferer of low back pain who can do even a single sit-up is very rare indeed"

Strong abdominal and trunk muscles are essential for a pain-free back.

A patient with acute symptoms and signs of disc herniation will benefit from strict bedrest, but :

"Movement, exercise and, above all, work are more beneficial to back pain or sciatica than any other therapeutic modality, although naturally, heavy loading of the upper body is contraindicated" (Simon, 1992)

The "Injured-on-duty" back

The IOD back differs from all other back syndromes and has many facets.

If handled incorrectly, minor injuries can become major disabilities. The patient can become an invalid especially if he is unhappy or bored at

work. The playing of "pain games" often have no solution and, frequently, no end.

Having said this, it is not to deny that the pain is real. Pain has many dimensions and is real in all of them. One sort of "pain" has no precedence over another form e.g physical pain over existential pain. Our language of communication unfortunately does not differentiate between them.

The IOD back syndrome has a ripple effect, not only on the workman, but on his family, his fellow workmen, his doctor, the WCA commissioner and many others.

They often have a psychological profile that was present before injury. One of the strengths of family practice is that one can almost predict which patient is going to develop the IOD back syndrome if the patient is known well enough. They have an increased incidence of emotional difficulties, depression, personality disorders, alcohol abuse, and hypochondriasis. They often have marital and domestic problems and a previous history of frequent absences from work and previous injuries.

In spite of all this, a surgeon with a sufficiently inflated ego can always be found to challenge the problem.

The end result is often the sad face, the "nothing-helps me" syndrome, the sinking heart in the doctor and the disability pension. To treat this difficult condition once it is underway with all its ramifications is almost impossible.

The answer is **the preemptive strike** during the first consultation and its follow up in the next day or two. A detailed history is taken and the situation explained to the patient, and in the majority of cases he is reassured that it is not serious and that he will be back at work in a short time. This is one occasion when a normal X ray may help. If in doubt about interpreting the X ray, **hold** your counsel.

Follow these initial consultations with the **long winter campaign approach** (Christiaan De Wet and General de la Rey were good at these diversionary tactics, anticipating the next moves etc) which involves **the great stalling tactics of general practice**. (see in coming Essential CME series, only in SA Family Practice or at a cinema near you)

If you refer an IOD back, chose an orthopaedic surgeon with similar views on life and state your case for conservative treatment. (Du Toit, 1992; Simon, 1992, Ellis, 1995)

Sacroiliac joint strain

I find in practice that this often presents in women during menstruation with low back pain and sacroiliac area pain which radiates through to the groin and front of the thighs (dysmenorrhoea presents like this too). The textbook says it is common in pole vaulters, of which our waiting rooms are always full.

On clinical examination you often find tender nodules in the area of the sacro-iliac joints which may respond well to local\steroid injections.

There is a very nice manipulation one can do in one's rooms for sacroiliac joint strain and a useful exercise that one can teach the patient to do at home.

Keep in the back of your mind that sacroileitis can be caused by inflammatory disease, ankylosing spondylitis (HLA B27) etc.

Meralgia paresthetica

This is a very sneaky diagnosis to make from general practice. You can collect several brownie points in the

tea room if the name is dropped into the conversation with an off-hand nonchalance.

The patient presents with pins and needles, numbress or burning sensation of the anterior and lateral thigh. It is due to the anterolateral cutaneous nerve of the thigh being compressed as is passes under the inguinal ligament where it is attached to the anterior superior iliac spine.

It is treated by a simple release operation.

Other causes of back pain

Keep in mind the prostate, the bladder and the uterus as causes of low backache.

A rarer cause is aortic aneurysm especially in the elderly obese. Remember carcinoma of the prostate with metastases to the lumbosacral region in the elderly.

Thoracic spine pain

Pain in the thoracic spine is not an uncommon condition in general practice. Pain to the side of the thoracic spine on the border of the scapula is usually due to subscapular tendinitis, which is fairly common and usually responds to the general routine for orthopaedic conditions in general practice, viz :

- the three As,
- physiotherapy\laser\ultrasound or
- injection of trigger areas with local and steroids.

Pain in the midline thoracic spine is usually due to dysfunction of one or more of the joint articulations, either the costovertebral or the apophysial joints or both. Herniated discs in the thoracic region are rare (1 in 200 prolapsed discs).

Treatment may be the routine above but they may be dramatically improved by the manipulations, thoracic thrust technique or thoracic lift technique.

Check for osteoporosis, spinal inflammation, anticoagulant therapy etc before doing these manipulations.

As an addendum here, remember that pain originating from the thoracic spine is a common cause of anterior chest pain, which is often overlooked. Many patients are now undergoing unnecessary expensive coronary angiography for thoracic spine problems.

All GPs (and the public) are acutely aware of excluding cardiac causes of chest pain but it is possible to distinguish between musculoskeletal causes and cardiac causes.

In musculoskeletal causes :

- The pain is a dull ache with exacerbations and the patient has often had similar pains elsewhere in the body.
- The severity of the pain varies and is related to posture and activity.
- There is a more segmental region of pain especially if the pain is referred.

It is useful to remember that the emphasis in medical training is **to examine the patient from the anterior position** and assessment of the posterior is often ignored especially when the patient presents with anterior chest pain. (from Broadhurst N A. The thoracic spine and its pain syndromes. Australian Family Physician 1987;16:738-746.)

South African Rural Practice

This section presents a problem orientated approach in the context of rural practice.

The context is a remote rural GP or government clinic treating low income or poverty stricken patients.

"In primitive societies, disuse of the low back is not compatible with survival and may help to account for the near absence of this disability in these cultures" (Mayer, 1985)

Many patients in this clinic complain of backache coupled with joint pains and headache\tiredness. This may be a symbolic grouping of symptoms that express hidden agendas of life weariness etc, ageing, existential pain, etc.

Masked depression should always be born in mind.

Lumbar disc problems appear to be relatively uncommon perhaps due to exercise, manual labour and strong lumbar and abdominal musculature. Ligaments strains due to manual labour are common as well as osteoarthritic pain in the elderly.

Remember pelvic infections and STDs as a cause of backache as well as abdominal pain.

Backache is a common complaint in bus\truck drivers and machine operators.

Two of the commonest causes of backache are due to mechanical strain from manual labourers on the one hand and the exact opposite of obesity and lack of exercise on the other.

Most are treated with analgesics and NSAIDs with good effect. I have used

indomethacin 25 mg two, three times a day after food for five days only with good effect in this population for many years. The patients treated have been in "closed" populations (hostels, industrial clinics etc) that regularly attend the same clinics and no adverse side effects have been noticed or reported. Indomethacin in the white population has an incidence of gastrointestinal side effects similar to that of high dose aspirin and also side effects of headaches and dizziness.

Paracetamol is the safest drug for long term use, if analgesia is all that is required.

Unguent methyl salicylate massaged into the skin may also help break the pain cycle.

Most patients in this clinic ask for an injection (which is the equivalent of more sophisticated patients asking for an X ray).

An injection of diclofenac is normally given for immediate relief of discomfort. (see question in Teaching Old Docs, New Tricks)

If depression or similar conditions are felt to be associated with backache then low dose tricyclics may help potentiate analgesia and the dosage can be increased at follow up visits if necessary.

Myalgia\fibromyalgia in black patients

This is a common condition of Black patients. The pain may be over a wide area but is often concentrated across the shoulders, between the shoulder blades and in the middle and lower back.

Examine for a cryptic infection,

there is sometimes a painless acute tonsillitis etc.

Ignorance of these muscular pain syndromes often leads to incorrect diagnoses of neurosis although many have a tension state present or concomitant depression.

Backache is thus just one of the complaints in generalised fibromyalgia along with chest pain and headache.

Treatment includes stopping caffeine, antiinflammatories, heat, massage and graded stretching exercises. Remember low dose tricyclics (10-25 mg) may also help as well as other psychotherapeutic agents such as fluanxol etc.

Management may involve long term support and intermittent courses of analgesics and NSAIDs. Trigger areas can be injected with local anaesthetic and\or local steroids.

In this context patients may present with advanced or serious diseases such as tuberculosis of the spine.

Tuberculosis of spine

TB of the spine can be very subtle. Check the thoracolumbar junction for tenderness or swelling (often the site of TB spine). This swelling is insidious and is often, surprisingly, not tender. TB spine can also present as a psoas abscess pointing in the groin. Once deformity (e.g gibbus) is present, the disease is well advanced. Early detection is therefore important and a low index of suspicion is needed. Beware of back pain in a Black patient in a rural settingthese patients don't get back pain for nothing. X rays of the thoracic spine and thoraco-lumbar junction will show vertebral endplate involvement with the disc space preserved before deformities start. Also CXR, mantoux, ESR, urine for AFFBs etc. Tuberculosis affecting bones and joints is located 50 % in spine, 10 -15 % in hips and 10-15 % in knees, 20 % other joints.

Inflammatory disease and backache

Pelvic inflammation and STDs such as Reiter's syndrome must be kept in mind as well as prostatitis. Also inflammatory bowel symptoms.

Vertebral osteomyelitis from pyogenic infection, brucellosis and bacillus typhosus are rare causes of backache.

The under five minute butterfly examination

We often do not have time to do as full an examination as we would like on the patient. The next best option is to do an examination or investigations, which have the best chance of revealing or confirming one's diagnosis without missing something important. Like a butterfly which lands here and there, where it thinks there is the best chance of getting the pollen.

There is a law of diminishing returns in which additional examinations or investigations add no new knowledge or have no further affect on our treatment decisions.

The Butterfly examination is a screening test which confirms or rejects our first or forming hypotheses and diagnoses in our minds as the examination proceeds. It can thus be

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extended as necessary but need not go on past a certain point following some rote, routine or ritual.

For instance, the outcome of a patient presenting with backache can broadly be divided into four : treatment with NSAIDs and analgesics etc, investigate more (x ray etc) and reexamine, admission to hospital or referral to a specialist.

Where is the "**cut-off**" point then? (The following is only put up for debate and not as policy)

Cut-off Point One : You might have unconsciously made up your mind, having takeg a history, by the time the patient has taken off his shoes and climbed onto the bed. You may have decided which of the four routes to go already and any further examination will not alter your decisions or treatment (although they will confirm and reassure). Your chances of finding anything that will alter this decision are slim, taking into consideration your training and experience but not negligible. The debate is how much time you have to spend excluding this small percentage as per the law of diminishing returns.

Cut-Off Point Two: could be after you have felt and examined the area of pain and straight leg raising and tested the power of dorsiflexion of the feet.

End-Point Three: would be examination of the reflexes with a patella hammer and testing for sensation loss.

Do GPs use their patella hammers and if on the rare occasions that we do, can we interpret the results? If we threw away all the patella hammers in all the GP consulting rooms throughout the country, would it make any difference to any decisions, outcomes or treatment regimens? The specialist, on the other hand, whose patient profile has a high percentage of referred backache with neurological complications needs a patella hammer, uses it often and includes its results in his decisionmaking process.

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In the examination of backache the two questions in your mind are :

Is this a serious backache? Is there a neurological deficit?

The examination takes under 5 minutes:

Ask the patient to take off trousers\dress and shoes and observe (60 seconds).

Ask patient to bend forward and touch toes and palpate spine and ask patient to stand on tip toe (30 seconds).

Patient lies on bed and straight leg raising test and knee jerks.

Roll legs to check hips.

Test power of dorsiflexion of feet and ankle jerks.

Have you now passed the point of no returns on further time and effort investment?

If all the above is normal, probably not, but if some features are positive then the position of the lesion may be sought via further reflexes, neurological tests, sensation loss, other leg manoeuvres etc.

Teaching Old Docs New Tricks

You are a general practitioner in your mid forties and have been in practice for fifteen years in a rural area of South Africa. You have attended some congresses but the work load of your practice and bringing up your family have left you with a need to update your knowledge. You decide to sit one of the postgraduate exams in family medicine. You have written the papers and now go for the oral examinations. The examiner explains that a revolution has occurred in family practice theory since you qualified and asks you the following questions :

Question one: A woman aged 65 years presents with low back pain, buttock pain and pains in the legs on walking, standing or bending backwards. She gets relief from the pain on bending forwards and is able to walk upstairs without pain but not downstairs. What are you dealing with?

Answer: You probably have a case of spinal stenosis which is associated with narrowing of the spinal canal and compression of the spinal nerves. The patient is usually over 60 years with osteophytes\osteoarthritis.

Exclude a vascular cause of the symptoms and first treat conservatively. If symptoms persist, surgery can often give a dramatic response.

Question two: Relatively few cases of backache are amenable to specialist help, yet many are referred to orthopaedic surgeons. Why do you think this is so?

Answer: Well, many are referred for social reasons and work related pressure. Patient insistence on a second opinion is another. Referral may also reassure the patient that all possible avenues have been explored. It may also be to reassure the doctor that no serious pathology has been missed.

Question three: What medical criteria would you use to refer a patient with backache?

Answer: Persistent pain, unremitting and

uncontrollable pain, progressive neurological signs, high erythrocyte sedimentation rate, weight loss and systemic symptoms, suspicion of malignancy or tuberculosis.

Question four: What do you understand by the term spondylolisthesis?

Answer: It is the forward displacement of one vertebra on the vertebra below. This usually occurs between the 5 th vertebra and the sacrum and is due either to injury or a congenital defect.

Question five: What do you understand by the term spondylolysis?

Answer: It's your turn to answer this one, write answer on line above then look it up. (so you didn't know, did you?)

Question six: If a patient asks you for an injection and you don't really think it is necessary (e.g in a rural clinic where it has been the custom to give injections) what do you do?

Answer: Beware of this question. It is a curved ball which can turn in any direction on hitting the ground. Have clear all the arguments from both sides of the fence.

The arguments go in a circular fashion and include patient expectations, real or placebo effect, joint decision making (or informed decision making), patient autonomy, primum non nocere (first do no harm), acting in the best interests of the patient (beneficence), treating the patient as an individual in his own context as well as the disease (three stage assessment) etc.

Which all goes to show that the only thing that you can be sure of in life is that you can never be sure of anything.

Part 4 Multiple Choice Section (MCQS)

Multiple choice questions are intended to cover the factual clinical areas of general practice. They also test reasoning ability and understanding of basic facts, principles and concepts. The questions are of the true/false type. In some examinations marks are deducted for incorrect answers or failure to answer while in others marks are not deducted for incorrect answers. These questions are not set in an "examining mode" but rather in an "education mode". Circle T for True or F for False.

Sciatic Nerve Entrapment Syndrome

- 1. T\F Occurs more commonly in females over the age of 40
- 2. T\F Back and buttock pain that wakes the patient at night are cardinal features.
- 3. T\F It is often only considered as a diagnosis late after laminectomy or other diagnoses have been put forward.
- 4. T\F The straight leg raising test is usually negative

The Piriformis Syndrome

- 5. T\F You have never heard of it
- 6. T\F It is a rarely recognised form of buttock and leg pain
- 7. T\F The major findings include buttock tenderness extending from the sacrum to the greater trochanter and tenderness of the piriformis muscle on rectal or pelvic examination.
- 8. T\F The diagnosis is clinical with no useful investigative procedures to confirm this diagnosis.

Non-Steroidal Antiinflammatory Drugs

- 9. T\F Are safe to use with hypertension and cardiac failure
- 10.T\F There is a wide variation in individual response
- 11.T\F Adding a low bedtime dose of amitryptyline or impramine potentiates the analgesia of NSAIDs.
- 12. T\F Do not work in osteoarthritis

Facet Joint Problems

- 13. T\F Can present with sudden back pain
- 14. T\F Pain is often worse with extension, though full flexion may also cause discomfort.
- 15. T\F The facet joint may produce referred pain down the leg.
- 16. T $\$ Respond well to manipulation or localised steroid injections.

Causes of Backache outside the spinal column should be kept in mind (Macnab, 1977).

These include :

- 17. T\F Aortic aneurysm can mimic low back pain.
- 18. T\F Pancreas, duodenum and kidneys can cause backache
- 19. T\F Carcinoma of the breast or prostate
- 20. T\F Pathology of pelvic organs

Answers

- 1. True
- 2. True
- 3. True
- 4. True
- 5. True
- 6. True
- 7. True
- 8. True
- 9. False NSAIDs have a tendency to impair renal function and cause sodium retention so they may provoke or aggravate hypertension and cardiac failure.
 10. True. Many patients
- not responding to one drug may well respond to another.
- 11. True
- 12. False
- 13. True
- 14 True
- 15 True
- 16 True
- 17 True
- 18 True
- 19 True, From
 - metastases
- 20 True

Sources and Resources

BOOKS THAT SOUTH AFRICAN GPS FIND MOST USEFUL TO KEEP IN THEIR ROOMS

- The South African Family Practice Manual, published by South African Family Practice.
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