Is There Sexual Activity After Low Back Pain? A Clinical Commentary

Introduction

Individuals with low back pain (LBP) are typically told how to lift, sit, bend, and exercise, but rarely are they advised on how to perform sexual activity.[1] Sexual activity can be as important as other activities but is often difficult to talk about.[2] Talking about sex can be very embarrassing to both patients and health professionals, and for this reason, it is often neglected.[3] However, it is important to note that pain, particularly LBP, can affect the ability to respond sexually and can also limit free movement, which can ultimately affect the positions that individuals assume to have sex.[1-3] Sexual intercourse has been indicated as a strong predictor of people's quality of life and one of the inherent measures of health and disability.[4] If sexual intercourse is an activity in which individuals with LBP are interested, there is no reason to limit them.

Even though inappropriate sexual behavior can cause or aggravate LBP, actual statistics are yet to be examined because the problem is not widely reported.[1] However, a previous study[5] indicated that 81 out of 100 individuals with LBP complained about sexual difficulties and that LBP was highly associated with both lower amounts of practiced sexual intercourse and a lower sexual quality of life. In addition, the study also reported that the problems most experienced during sex by individuals with LBP were finding suitable sexual positions and difficulties with spinal movements.[5] In another study, Nikoobakht *et al*.[6] reported sexual problems in 71.1% of Iranian women with LBP while the corresponding figure for healthy women was 36.8%, indicating a substantial margin. Moreover, a study by Berg *et al*.[7] showed that 84% out of 152 Swedish patients with LBP reported impaired sexual functioning with 34% reporting that their sex life caused some extra pain and an additional 30% reporting that their sex life was severely restricted by LBP.

On the other hand, a recent review of the biopsychosocial model to managing LBP[8] has recommended the integration of some key social domains into the model, of which sexual activity by extension, is inclusive. Unfortunately, despite the evidence of decreased sexual activity among individuals with LBP and the need for its integration into the biopsychosocial model of care, a thorough literature review indicated scarcity of studies that have addressed LBP-related sexual issues. This paucity of evidence indicates that studies in this context are potentially needed to optimize patients' outcomes and well-being. For this reason, this commentary was developed to help clinicians to assist individuals with LBP to identify how LBP affects their sexual activity and to find solutions to the problems.

The Link between Sexual Activity and Pain

Studies[9,10] indicate that sexual behavior decreases pain perception by stimulating the release of endogenous opioids (EOs) peptides, potentially to prevent intense sexual arousal from becoming unpleasant, thereby making it more valuable and rewarding. There are many types of EOs, but the three peptide linkages, namely β-endorphins (which associate with mu–μ–receptors), met-enkephalins (which associate with delta– δ–receptors), and dynorphins A and B (which associate with kappa– κ–receptors) are the most important ones involved in analgesia. By evaluating the analgesic effects of EOs, β-endorphins have not only been indicated as demonstrating a comparable analgesic effect to morphine[11] but are 18–33 times more potent.[12] However, the biological mechanism through which EOs are released is poorly understood, but considering the two main effects of morphine, EOs are emitted when the physiological process of analgesia and reward (feeling of pleasure and euphoria) are activated simultaneously, as during sexual behavior.[9,10] Evidence has shown that sexual intercourse is associated with analgesia in humans and rats[13-15] and is also rewarding.[16] Moreover, to confirm the influence of EOs on sexual performance, opioid receptors were further blocked with narcotic antagonists, and it was observed that sexual performance decreased by extending postejaculatory intervals (time to resume copulation after ejaculation).[14,15] Furthermore, the studies also indicated that prolonged copulation (near-sexual exhaustion) depleted opioid receptors in the brainstem and this increased pain perception.[14,15] All these effects may indicate the possibility of exacerbating LBP unknowingly during sexual intercourse as it is likely that partners may not recognize pain due to opioids' analgesia.

Contributing Factors to Reduction in Sexual Activity

Many partners exhibit transient problems with their sexual relationships irrespective of whether one partner has a pain issue or not. When pain comes into the relationship, sexual problems may result due to the combination of external and internal factors.

External factors

These are the factors that come from the environment, and they include the following.

The advice of others

Patients may have been told to avoid some sort of activity, but the issue of sexual activity is usually overlooked. If patients

are worried that any physical activity will lead to increased pain, then they will avoid sex too.[3]

Medication

If medication leads to sleepiness or reduction in sexual drive, then trying to start or respond to sexual intercourse may seem extremely difficult. For example, some medications such as "amitriptyline" or "carbamazepine" may affect sexual intercourse, either by reducing sexual drive or limiting the ability to achieve a strong erection.[17]

Partner's concern

May be a partner to a patient with LBP is aware of his/her partner's struggles to cope with pain and may, therefore, be discouraged that approaching the patient may lead to increased pain, particularly when the patient had avoided the partner in the past. For this reason, the partner might just give up approaching the patient sexually and even think that the patient no longer cares for him/her.[18]

Internal factors

These are the factors that come from individuals with LBP. These include the following.

Self-esteem

How patients feel about themselves will affect how they respond to their partners. Self-esteem may be compromised if patients' roles/functions in the family have declined due to pain. This problem may be more severe if there is a loss of employment or financial independence, which can make patients have the illusion that they are bad partners, husbands/wives, and/or providers.[18]

Self-motivation

Pain may quickly decrease arousal because thinking about the pain can be equally effective in limiting the mood. This can make the patient think that it is better not to start something that might not be possible to finish. Pain may quickly drain energy and maintaining a relationship requires some amount of energy that such patients may feel they lack.[18]

Fear of movement

Sexual intercourse requires partners to hold each other and to move joints and muscles. Patients may avoid sexual contact thinking that their pains would increase with movement.[3]

Lifting of partner

Some sexual partners enjoy lifting each other during sexual intercourse, and this can harm the individuals because lifting is associated with LBP and other musculoskeletal problems.[19]

Steps for Rebuilding Sexual Life

Effective communication

If partners are trying to engage in sexual intercourse, then a discussion is the first step. The partner of a patient with LBP may not be aware that it is the pain that makes the patient avoid a sexual relationship. Discussing and listening to each other in a very caring way is important.[18]

Mood improvement

Patients with LBP may try to improve their mood by looking good, dressing well, and ensuring proper personal hygiene. These activities will boost self-esteem and help them feel more comfortable with their partners and will also help their partners to like them more.[18]

Planning the sex

Individuals should plan for sex at a time when they are in a good mood, and when they have minimal pain. All possible techniques and massages may be used to assist in relaxation and mood enhancement.[20] It is also essential not to perform sex on hard surfaces to avoid bruises or reinjury. Individuals with LBP should use environments that are soft and firm (e.g., a firm mattress or cushion chairs) to ease body pressure against the contact surface. It is also important not to perform sex on elevated platforms to prevent falling, particularly during orgasm.

Starting the sex

Patients should start sexual intercourse gently and slowly, minimizing rough movements and sudden changes of position. Patients should move by rocking the pelvis and spine as one unit and where appropriate should use lumbar support. However, in most circumstances, the partner without LBP should be the more aggressive one, and the partner having LBP should move less and must be as comfortable as possible. In addition, a water-soluble gel (such as the K-Y Jelly) may be used to improve lubrication and reduce painful intercourse.[20] Moreover, it is also advisable to avoid prolonged sexual intercourse as this depletes opioid receptors in the brainstem, which may also lead to an increase in pain.[14,15] Furthermore, the lifting of a partner during sex should also be avoided; however, if necessary, lifting should be done with the spine in an upright position to minimize tension in the erector spine and intervertebral discs.[19]

Positional changes

Individuals with LBP should choose positions that are most comfortable for them during activities of daily living and use them during sex. It is important to accept that the type of positions that individuals were used to might not be comfortable for them when they have LBP, and they should find something better. Individuals should try new positions that do not cause pain and should discuss with their partners whether these positions are acceptable to them or not.[21] However, based on evidence, individuals whose LBP is elicited by forward-bending (e.g., patients with disc herniation or prolapsed) should assume sexual positions that involve back bending,[22,23] while individuals whose LBP is elicited by back-bending (e.g., patients with spinal stenosis) should assume sexual positions that involve forward bending.[22,23]

Discussion

Individuals with LBP commonly report recurring sexual dysfunction; however, this problem is often neglected by

health-care professionals. Fear-avoidance is one of the problems exhibited by individuals with LBP, and this affects their sexual activity.[24] If individuals with LBP experience pain from certain physical movements, they will likely begin to fear and avoid those movements. For some individuals, fear-avoidance may lead to avoidance of sex and decreased sexual function due to fears that sexual activity, as well as uncomfortable positions, can worsen pain or produce physical injury.[25] This avoidance behavior can have increasingly detrimental effects on both the mental and physical health of individuals with LBP and can make the sexual activity less attractive.[26] Even after LBP subsides, the lingering effects of fear-avoidance may still be present[24,27] and this indicates why the problem is important to be investigated and managed whenever present.

The most circulated recommendation for individuals with LBP is to adopt the side-lying position when engaging in sexual intercourse.[21] Given that no one-size-fits-all on this issue, we recommend that individuals are advised to discuss with their partners to explore the positions that best suit them during sexual intercourse and then adhere to those positions going forward. This recommendation is also in line with the published evidence by Sidorkewicz and McGill[22,23] who recommend that clinicians should examine individuals for directional preference to spinal movements and then classify them as either flexion-intolerant (those whose LBP becomes aggravated with flexion) or extension-intolerant (those whose LBP becomes aggravated with extension) before prescribing sexual positions. While this recommendation based on spinal biomechanics may be helpful, clinicians need to thoroughly consider the full cycle of sexual disability.[27] Other factors, such as effective communication, mood enhancement, and back care education described earlier in this commentary, are equally important in rebuilding a happy sexual life.

Conclusion

LBP can affect many aspects of peoples' lives including sexual activity; however, it should not be the reason why sexual intercourse should be avoided, given that there are important steps that can be taken to ameliorate the situation. This commentary is expected to help clinicians to assist individuals with LBP to find solutions to their decrease in sexual activity and to ensure consistency with treatment programs that aim to improve activity limitation that affects social relationships. It is recommended that randomized clinical trials may be conducted to determine the best sexual positions for different types of low back disorders.

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