

Therapeutic and ethical dilemma of puberty and menstruation problems in an intellectually disabled (Autistic) female: A case report**Azadeh Memarian**

Iran University of Medical Sciences, Iran

Autism consists of a group of developmental brain disorders, collectively called autism spectrum disorder (ASD). Teenagers with learning and physical disabilities are more likely to have menstrual problems than the general populations. The parents of a 12-year-old girl with ASD and intellectual disability requested that she should undergo hysterectomy because of her numerous problems of puberty (menstruation), including poor hygiene and polluting herself and the environment, not allowing anyone to place or change the pads and changes in mood and physical health before her period. After the legal medicine organization reviewed her medical records, physical examinations and medical consultations with a gynecologist and psychiatry, surgery was not accepted. Hysterectomy (surgery) performed because of the age of the child is not recommended, either physically or morally. The use of hormone replacement therapy has side effects, such as osteoporosis. In these cases, it seems that noninvasive methods (behavioral therapy and learning care skills) under the care of welfare experts are more effective and morally acceptable. In our Islamic society, we attempt to provide justice and prevent any assault to intellectually disabled females. We emphasize individual and social benefits and make decisions about each case separately due to the range of IQ, physical ability, social and cultural level of the family and ethical principles. This review emphasizes that care must be individualized. The decision for treatment must rest on a multidisciplinary team consisting of gynecologists, psychologists, and forensic specialists and is based on Islamic and ethical law in legal medicine organizations.

azade.memarian@yahoo.com**Leech therapy and its effects in Arthralgia****Shiffa MSM and Fahamiya N**

University of Colombo, Sri Lanka

Leech therapy is used traditionally in which leeches are applied (artificial infestation) to a particular area for treating certain ailments such as skin disease, inflammatory disorders, varicosities, chronic wounds, etc. It is also being used in modern surgery; especially in reconstructive and micro-vascular surgery. Avicenna, Galen, Broussais, Von Ronsenstein and several other physicians treated many diseases by applying leeches. Leech species such as *Hirudo medicinalis*, *Hirudinaria manillensis*, *Hirudo michaelseni*, *Hirudo nipponia*, *Macrobdella decora* (American medicinal leech), *Hirudo verbena*, *Hirudo orientalis* and *Hirudinaria granulose* are commonly used in the medical field. When leech tends to suck the blood, it injects anesthetic agents, anticoagulant and some other substances, in order to have the meal continuously without any interruption. In other way, leech saliva contains bioactive substances that would help to dilate blood vessels, decreases the blood viscosity, and deaden the pain of the bite. Scientific researches revealed that the beneficial effects of leech therapy occur due to injection of these bioactive substances. They are proteinase inhibitors: bdellins, hirustasin, tryptase inhibitor, eglins, inhibitor of factor Xa, hirudin, inhibitor of carboxypeptidase, decorsin, gelin, and inhibitor of complement component C1s and also other bio-active substances such as prostaglandins, vasodilators, anesthetics and proteins like calin, apyrase, hyaluronidase, destabilase, histamine-like vasodilators, collagenase, piyavit, ghilanten, guamerin A, piguamerin, gamma-glutamyl transpeptidase, platelet activating factor antagonist, bufrudin and poorly characterized anaesthetic and analgesic compounds. Arthralgia is the term used for pain in the joints commonly occurs due to inflammation, accumulations, depositions and other disorders of the joints. Recent researches support that the leech therapy relieves pain, stiffness, inflammation, joint dysfunction and other symptoms in patients with joint disorders due to its anti-inflammatory, antiseptic, vasodilatation, thrombolytic, antibacterial and analgesic actions. Backer Marcus, et al. and Michalsen, et al found that the leech therapy was more effective in controlling pain and disability in individuals with joint pains. Abbas Zaidi, et al. and Mohamed Shiffa, et al. found that the leech therapy seemed to be an effective symptomatic treatment for osteoarthritis of the knee. Therefore, this therapy can effectively be used to treat arthralgia in joint disorders.

dr.mshiffa@gmail.com