

# DODIR I KOŽNE BOLESTI

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**Rončević-Gržeta, Ika; Bolanča Erak, Marina**

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## **DODIR I KOŽNE BOLESTI**

### **/ TOUCH AND SKIN DISEASES**

Ika Rončević-Gržeta, Marina Bolanča Erak

#### **SAŽETAK/ABSTRACT**

Koža i osjet dodira najranije se razviju tijekom intrauterinog razvoja, što govori o njihovoj važnosti i na biološkom i na emocionalnom planu. Koža i mozak povezani su bidirekcionalno. Poznate su regije mozga, neurotransmitorski i hormonski sustavi povezani s dodiranjem i prepoznavanjem emocionalnog značenja dodira. Osjet dodira ima važnu ulogu u komunikaciji i prenošenju različitih emocija. Komunikacija dodiranjem počinje još intrauterino i prvi je oblik komunikacije nakon rođenja. Kontakt „koža na kožu“, njega djeteta, maženje, zagrljaji i ostali načini stimulacije osjeta dodira važni su za biološki rast i razvoj, kao i za psihološko zdravlje. Dimenzija uloge dodira najviše se spoznala kroz primjere deprivacije ovog osjeta. Uskrata dodira u najranijoj dobi može rezultirati zaostajanjem u fizičkom razvoju, zaostajanjem na kognitivnom planu, a može rezultirati promjenama u ponašanju u smjeru agresivnog ponašanja ili osjećaja srama te može umanjiti izgled za oporavak od bolesti u djece, napose u institucijama. S deprivacijom osjeta dodira dovodi se u vezu niz kroničnih bolesti kože, neki funkcionalni i psihosomatski poremećaji te više mentalnih poremećaja. U ovom radu, kroz prikaz pacijenta koji boluje od psorijaze, nastojat ćemo i na kliničkome planu prikazati poveznicu između kože i emocija.

*/ The skin and the sense of touch are the earliest to develop during intrauterine development, which speaks of their importance both biologically and emotionally. Skin and brain are connected bidirectionally. Brain regions, neurotransmitter and hormonal systems associated with touch and recognition of the emotional meaning of touch, are well known. The sense of touch plays an important role in communication and conveying different emotions. Communication through touch begins intrauterine and is the first form of communication after birth. Skin-to-skin contact, child care, cuddling, hugs and other ways of stimulating the sense of touch are important for biological growth and development, as well as for psychological health. The dimension of the role of touch is best understood through examples of deprivation of this sensation. Deprivation of touch at an early age can result in delayed physical development and delayed cognitive development, as well as changes in behavior towards aggressive behavior or feelings of shame, and can reduce the chances of recovery from illness in children, especially in institutions. A number of chronic skin diseases, some functional and psychosomatic disorders and several mental disorders are associated with the deprivation of the sense of touch. In this paper, through the presentation of a patient suffering from psoriasis, we will attempt to present the link between skin and emotions on a clinical level.*

## KLJUČNE RIJEČI / KEYWORDS

dodir / *touch*; deprivacija dodira / *touch deprivation*; zdravlje / *health*, mentalno / *mental*, somatsko / *somatic*

**Ika Rončević-Gržeta**, Klinika za psihijatriju, KBC Rijeka; Medicinski fakultet Sveučilišta u Rijeci, Katedra za psihijatriju i psihološku medicinu, psihijatrica, edukatorica iz grupne analize

**Marina Bolanča Erak**, Klinika za psihijatriju i psihološku medicinu, KBC Zagreb, psihijatrica, psihoanalitička psihoterapeutkinja

/ **Ika Rončević-Gržeta**, *Clinic for Psychiatry, Clinical Hospital Centre Rijeka; Faculty of Medicine of the University of Rijeka, Department of Psychiatry and Psychological Medicine, psychiatrist, group analysis educator*

/ **Marina Bolanča Erak**, *Department of Psychiatry and Psychological Medicine, University Hospital Centre Zagreb, psychiatrist, psychoanalytic psychotherapist*

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## DODIR U AFILIJATIVNOM PONAŠANJU I KOMUNIKACIJI

Prema definiciji komunikacija, lat. *communicatio*, znači priopćiti, učiniti nešto općim ili zajedničkim. Komunikolog Paul Watzlavik (1974) kaže da je komunikacija *conditio sine qua non* u životu ljudskih bića. U društvenome komunikacijskom procesu poruka može biti višeznačna, ovisno o primatelju i specifičnim okolnostima može se na više načina registrirati i razumjeti. U komunikaciji, osim manifestnog sadržaja, govorimo o sebi, odražavamo svoje mišljenje o sugovorniku te izražavamo vlastita očekivanja ili nastojimo postići određeni učinak na sugovornika. Za način kako će poruka biti shvaćena, uz ostalo, važni je emocionalni stav pošiljatelja te način na koji

## TOUCH IN AFFILIATIVE BEHAVIOR AND COMMUNICATION

According to the definition of communication, the Latin word *communicatio* bears the meaning of communicate, make something general or common. Communicator Paul Watzlavik (1974) said that communication is a *conditio sine qua non* in the life of human beings. In the social communication process, a message can be ambiguous, and depending on the recipient and the specific circumstances, it can be registered and understood in several ways. Engaging in communication, in addition to the manifest content, we talk about ourselves, reflect our opinion about the interlocutor, and express our own expectations or try to achieve a certain effect on the interlocutor. Among other things, the



poruka utječe na emocije i ponašanje primatelja. Pri izravnom komuniciranju veza se održava preko emitivnih komunikacijskih organa (govor, kretanje, mimika) i njegovih receptivnih osjetila (sluh, vid, dodir).<sup>1,2</sup>

U prvom su planu vizualni i auditivni kanali za komunikaciju, međutim, dodir je često ključan za bolje razumijevanje misli ili osjeća u interpersonalnoj komunikaciji. Značenje osjeta dodira u socijalnim je interakcijama zapostavljeno.<sup>3</sup> Da je osjet dodira važan, tomu u prilog govore činjenice da osjet dodira tijekom razvoja fetusa prvi postaje funkcionalan te da se nalazi u najvećem organu – koži i nemoguće ga je isključiti. Drži se da je dodir jednako važan kao zrak, hrana ili voda.<sup>2,4</sup>

Koža izravno iz okoline prima niz informacija. Koža i njezini dodatci gusto su inervirani mrežom aferentnih senzornih i eferentnih autonomnih živaca. Dakle, senzorni aparat kože u bilateralnoj je komunikaciji sa središnjim živčanim sustavom. Senzorni živci prenose osjete dodira, rastezanja, pritiska i vibracija te osjet boli, bockanja i temperature. Autonomni su živci uglavnom simpatički i imaju ulogu u održavanju homeostaze regulirajući vazomotorne i pilomotorne funkcije te apokrine i ekrine znojne žlijezde. Stimulacija kože u službi je regulacije afekta i nošenja s intenzivnim emocionalnim stanjima.<sup>5,6</sup>

emotional attitude of the sender and the way the message affects the emotions and behavior of the recipient are important for the way the message will be understood. In direct communication, communication takes place by means of emitting communication organs (speech, movement, facial expressions) and their receptive senses (hearing, sight, touch).<sup>1,2</sup>

Visual and auditory channels for communication are in the foreground, however, touch is often the key to a better understanding of thoughts or feelings in interpersonal communication. The meaning of the sense of touch in social interactions is neglected.<sup>3</sup> That the sense of touch is important is supported by the fact that it is the first to become functional during fetus development, it is located in the largest organ - the skin, and it is impossible to turn it off. It is believed that the sense of touch is as important as air, food or water.<sup>2,4</sup>

The skin receives a series of information directly from the environment. The skin and its appendages are densely innervated by a network of afferent sensory and efferent autonomic nerves. The sensory apparatus of the skin is, therefore, in bilateral communication with the central nervous system. Sensory nerves transmit the sensations of touch, stretching, pressure and vibration, as well as the sensation of pain, pricking and temperature. Autonomic nerves are mostly sympathetic and play a role in maintaining the homeostasis by regulating vasomotor and pilomotor functions, as well as

Kontakt s drugim ljudskim bićem esencijalan je od intrauterinog razvoja pa do kraja života. Socijalni je dodir specifičan dodir i vrlo važan oblik neverbalne komunikacije. Unatoč tomu, malo je istraživanja koje sa bave osjetom dodira. Neka od njih funkciju osjeta dodira dijele na senzorno-diskriminativnu i motivacijsko-afektivnu dimenziju. Senzorno-diskriminativna funkcija ključna je kada treba odrediti lokaciju stimulusa na koži, istražiti obilježja objekta, identificirati objekt ili manipulirati njime. Afektivno-motivacijska funkcija određuje afektivnu, odnosno motivacijsku dimenziju osjeta dodira. Osjećaj ugone esencijalan je za socijalnu dimenziju dodira. Uгода osigurava afilijativne tendencije pojedinca, stvara i održava socijalne relacije te ima ulogu prijenosa emocija. Ovisno o afektivno-motivacijskim obilježjima odnosa, kao i o specifičnoj kulturi, kontekstu ili spolu, dodir može biti ne samo ugodan nego i neugodan, čak averzivan.<sup>6,7,8,9,10</sup>

Afektivna dimenzija dodira važna je za razmjenu i obradu društvenih informacija: kroz afilijativno ponašanje i komunikaciju; kroz afektivno procesiranje unutar puteva koža – mozak i obrnuto te kao baza za intersubjektivnu reprezentaciju. Pozitivan, ugodan dodir sveprisutan je u društvenim interakcijama, od onoga u svakodnevnoj komunikaciji do seksualnog. Osjećaj

apocrine and eccrine sweat glands. Skin stimulation serves the function of affect regulation and dealing with intense emotional states.<sup>5,6</sup>

Contact with another human being is essential from the period of intrauterine development until the end of life. Social touch is a specific touch and a very important form of non-verbal communication. Despite this, there is little research dealing with the sense of touch. Some of them divide the function of the sense of touch into sensory-discriminative and motivational-affective dimensions. The sensory-discriminative function is crucial when it is necessary to determine the location of the stimulus on the skin, to investigate the features of the object, to identify the object or to manipulate it. The affective-motivational function determines the affective, that is, motivational dimension of the sensation of touch. The feeling of comfort is essential for the social dimension of touch. Comfort ensures the affiliative tendencies of the individual, creates and maintains social relations and has the role of transmitting emotions. Depending on the affective-motivational characteristics of the relationship, as well as the specific culture, context or gender, touch can be not only pleasant, but also unpleasant, even aversive.<sup>6,7,8,9,10</sup>

The affective dimension of touch is important for the exchange and processing of social information: through affiliative behavior and communication, through affective processing within the skin-



ugode ima pozitivan utjecaj i neka je vrsta „ljepila“ koje povezuje pojedince unutar zajednice. Dodir u seksualnim interakcijama, kao i u interakcijama roditelj –dijete osnova je intenzivnoga, hedonističkoga društvenog dodira, iako se erotska dimenzija dodira može prepoznati i u drugim socijalnim interakcijama.<sup>8,10</sup>

U socijalnim se interakcijama zapaža nekoliko vrsta dodira. Jednostavan dodir podrazumijeva kratak, namjeren kontakt na relativno ograničeno mjesto na koži. Na primjer, kada želimo proći pokraj nekoga u skućenu prostor, nježno dotaknemo njegovu nadlakticu ili rame. Protrahirani dodir podrazumijeva dulji međusobni kontakt, često „koža na kožu“, uključujući pritisak, kao na primjer zagrljaj, držanje za ruke ili maženje. Dinamički dodir uključuje ponavljano kretanje po koži od jedne do druge točke kao npr. maženje ili masaža. Golicanje je posebna kategorija dinamičkog dodira. Riječ je o razigranu ponašanju, najčešće s djecom, obično u kontekstu svakodnevnih interakcija.<sup>8</sup>

Čak i jednostavni dodiri, kratkoga trajanja, mogu pobuditi pozitivna afektivna stanja (svidanje, atraktivnost...) i utjecati na poboljšanje povjerenja i suradljivosti.

Protrahirani dodir utječe na ublažavanje stresa, na ublaživanje boli i patnje u

brain pathways and vice versa, and as a basis for intersubjective representation. Positive, pleasant touch is ubiquitous in social interactions, from everyday communication to sexual. The feeling of comfort has a positive effect and represents a kind of “glue” that connects individuals within the community. Touch in sexual interactions, as well as in parent-child interactions is the basis of intense, hedonistic social touch. Nevertheless, the erotic dimension of touch can be recognized in other social interactions as well.<sup>8,10</sup>

Several types of touch are observed in social interactions. A simple touch implies a short, deliberate contact on a relatively limited area of the skin. For example, when we want to pass someone in a confined space, we gently touch their upper arm or shoulder. Prolonged touch involves prolonged mutual contact, often skin-to-skin, including pressure, such as hugging, holding hands, or caressing. Dynamic touch involves repeated movement across the skin from one point to another, such as caressing or massaging. Tickling represents a special category of dynamic touch. It refers to playful behavior, most often with children, usually in the context of everyday interactions.<sup>8</sup>

Even simple touches, of short duration, can induce positive affective states (liking, attractiveness...) and can influence the improvement of trust and cooperation.

Prolonged touch - promotes the relief of stress, the relief of pain and suffering

bliske osobe, stvaranje osjećaja povjerenja, a postoje dokazi da protrahirani dodir utječe na tjelesno zdravlje (regulacija lučenja inzulina, pad srčane akcije, regulacija krvnog tlaka), regulaciju spavanja te poboljšanje funkcija imunskog sustava kao npr. porast NK stanica.<sup>11,12</sup>

Masaža kao oblik protrahiranog dodira potiče vagalnu aktivnost, povećava razinu serotonina i smanjuje razinu supstancije P pa tako utječe na ublažavanje boli. Masaža rezultira i poboljšanjem mentalnoga zdravlja kao što su poboljšanje raspoloženja i pažnje.<sup>11</sup> U djece dodir utječe na tjelesno i psihičko zdravlje, poboljšava izgled za ozdravljenje i preživljenje. Protrahirani dodir zamjećujemo i u primata. Riječ je o aktivnostima kao „njega krzna”. Ovakav oblik komunikacije povećava osjećaj povezanosti i savezništva. Takvo je ponašanje u ljudi reducirano, iako se smatra da je bilo kakva akcija uklanjanja ili oponašanja uklanjanja s odjeće, tijela, odnosno kože, rudiment ovakvog ponašanja.<sup>8,13,14,15</sup>

Dodir ima ulogu u prenošenju misli i osjećaja, služi njihovoj regulaciji u drugima i obrnuto. Matthew J. Hertenstein et al. (2006) definiraju taktilnu komunikaciju kao „sistematične promjene u percepciji, mislima, osjećajima i ponašanju u funkciji dodira, uključujući i kontekst u kojemu se ta komunikacija

in a loved one, the creation of a sense of trust, and there is evidence that prolonged touch also affects physical health (regulation of insulin secretion, decrease in heart rate, regulation of blood pressure), sleep regulation and improvement of functions of the immune system, such as an increase in NK cells.<sup>11,12</sup>

Massage as a form of prolonged touch stimulates vagal activity, increases the level of serotonin and decreases the level of substance P, thus influencing pain relief. Massage also results in improved mental health, such as improving mood and improving attention.<sup>11</sup> In children, touch affects physical and mental health, improves the chances of recovery and survival. Prolonged touch is also observed in primates. It includes activities such as grooming. This form of communication increases the sense of connection and alliance. Such behavior in humans is reduced, although it is considered that any action of removing or imitating removal from clothing, body or skin represents the rudiment of this behavior.<sup>8,13,14,15</sup>

Touch plays a role in conveying thoughts and feelings, serves to regulate them in others and vice versa. Matthew J. Hertenstein et al. (2006) defined tactile communication as “systematic changes in perception, thoughts, feelings and behavior as a function of touch, including the context in which the same communication takes place”. According to a study conducted on a sample of blind people, the participants were able to recognize



zbiva". Na primjeru istraživanja provedena na uzorku slijepih osoba sudionici su sa 70 %-tnom točnošću, isključivo dodir, mogli prepoznati osam različitih emocija, od ugodnih do neugodnih. U svakodnevnom su životu primjer slijepe i gluhe osobe koje se sporazumijevaju protaktilnom komunikacijom.<sup>8,16</sup>

## BIOLOŠKI KORELATI POVEZANI S DODIROM

Neuroznanstvenici koji se bave istraživanjem perifernoga živčanog sustava smatraju da su specifični neuralni putevi zaduženi za prijenos nekih od ugodnih oblika dodira. Sigurno je da takvi putevi moraju biti specifični jer je potrebno razlikovati afektivnu dimenziju socijalnog dodira s obzirom na taktilnu stimulaciju koja nema afektivnu važnost.<sup>8</sup>

Anatomske strukture i putevi povezani s dodir: u koži se nalaze mehano-receptori koji prenose osjet u primarni aferentni neuron, potom u stražnji rog leđne moždine, pa sekundarnim aferentnim neuronom preko talamusa u središnji živčani sustav: senzorni korteks, inzulu i limbični sustav. Istraživanja su pokazala da inzula ima važnu ulogu u integraciji somatosenzornih i afektivnih podražaja, dakle osjeta dodira, s jedne, i afekta, s druge strane, što je važno za održavanje homeostaze.<sup>17,18</sup> Somatosenzorni korteks I. i II. imaju važnu ulogu

eight different emotions, from pleasant to unpleasant, with 70% accuracy and solely based on touch. In everyday life, examples are blind and deaf individuals who communicate by means of protactile communication.<sup>8,16</sup>

## BIOLOGICAL CORRELATES OF TOUCH

Neuroscientists studying the peripheral nervous system believe that specific neural pathways are responsible for the transmission of some of the pleasurable forms of touch. It is certain that such pathways must be specific, since it is necessary to distinguish the affective dimension of social touch in relation to tactile stimulation that has no affective meaning.<sup>8</sup>

Anatomical structures and pathways related to touch are the following: there are mechanoreceptors in the skin that transmit sensation into the primary afferent neuron, then to the posterior horn of the spinal cord, and through the secondary afferent neuron via the thalamus to the central nervous system: the sensory cortex, the insula and the limbic system. Research has shown that the insula plays an important role in the integration of somato-sensory and affective stimuli, i.e. the sensation of touch on the one hand and affect on the other, which is important for maintaining homeostasis.<sup>17,18</sup> Somatosensory cortex I and II play an important role in the integration



gu u integraciji osjeta dodira i vizualnog doživljaja dodira, odnosno promatranja dodira.<sup>19</sup> Ugodan dodir aktivira i medijalni orbitofrontalni korteks povezan s afektivnim procesima i nagradom.<sup>20</sup> Istraživanja na planu integracije osjeta dodira, vizualnog doživljaja dodira i okolnosti u kojima se kontakt događa važna su za razumijevanje mentalnoga stanja drugih, razumijevanje odnosa između pojedinaca i konačno za razumijevanje empatije. Spora C-vlakna odgovorna za provođenje ugodnog dodira imaju projekcije i u limbični sustav. Sporo provođenje prilagođeno je diskriminaciji podražaja te dekodiranju afektivnoga značenja dodira. Unatoč tomu što imaju receptore u koži, C-vlakna anatomski imaju više zajedničkih obilježja s interoceptivnim i visceralnim sustavom s kojim je povezan širok skup tjelesnih osjećaja kao bol, svrbež i glad nego s nociceptivnim i taktilnim sustavom koji prima podražaje izvana.<sup>5,8,21,22</sup>

Oksitocin ima važnu ulogu u aflijativnom ponašanju. Ovaj hormon luče neuroni smješteni u paraventricularnoj jezgri hipotalamusa (PVN) i u supraoptičkoj jezgri (SON). U cirkulaciju se oslobađa preko aksona koji završavaju u neurohipofizi. Projekcije iz PVN-a nalazimo u području limbičnog sustava (LS) i prefrontalnog korteksa (PFC). Važno je istaknuti i olfaktorni korteks i olfaktorni bulbus kako bismo podsjetili na ulogu mirisa u socijalnom poveziva-

of the sensation of touch and the visual experience of touch, i.e. the observation of touch.<sup>19</sup> Pleasant touch also activates the medial orbitofrontal cortex associated with affective processes and reward.<sup>20</sup> Research on the integration of the sensation of touch, the visual experience of touch and the circumstances in which the contact occurs are important for understanding the mental state of others, understanding the relationship between individuals and, finally, for understanding empathy. The slow C fibers responsible for conducting pleasant touch also produce projections into the limbic system. Slow conduction is adapted to the discrimination of stimuli and the decoding of the affective meaning of touch. Despite having receptors in the skin, C fibers anatomically have more in common with the interoceptive and visceral system, which is associated with a wide range of bodily sensations such as pain, itching and hunger, than with the nociceptive and tactile system, which receives stimuli from the outside.<sup>5,8,21,22</sup>

Oxytocin plays an important role in affiliative behavior. This hormone is secreted by neurons located in the paraventricular nucleus (PVN) of the hypothalamus and the supraoptic nucleus (SON). It is released into the circulation via axons that end in the neurohypophysis. Projections from the PVN are found in the area of the limbic system (LS) and the prefrontal cortex (PFC). It is important to highlight the olfactory cortex and the olfactory bulb in order to remind of the role of smell in



nju.<sup>23,24</sup> Oksitocin se nalazi i u stanicama niza perifernih organa kao uterus, žuto tijelo, amniji, placenta, enterociti, intersticijske stanice testisa, nadbubrežna žlijezda, srce, okusni pupoljci; osteoklasti/osteoblasti. Kada je u pitanju koža, treba istaknuti da se oksitocin nalazi u fibroblastima i keratinocitima koji imaju ulogu u upalnim bolestima kože kao što je atopijski dermatitis.<sup>23,25</sup> Oksitocin je u interakciji s nizom neurotransmitora i neuropeptida kao vazopresin, leptin, kolekistokinin (CCK), kortikotropin oslobađajući faktor (CRF), serotonin, dopamin, prolaktin, oreksin, glukokortikoidi. Pojačano lučenje oksitocina zamijećeno je kod bliskih parova, u žena za vrijeme porođaja i dojenja, u dijadi majka – dijete, u kontaktu s ljubimcima. Koncentracija oksitocina utječe na brigu za potomstvo, roditeljski stil, način privrženosti te općenito na osjećaj bliskosti i sigurnosti.<sup>23,26</sup>

Osim oksitocina u bliskim socijalnim interakcijama koje uključuju fizički kontakt i osjet ugodnog dodira važnu ulogu ima kortizol. Zamijećeno je da se lučenje kortizola smanjuje kod ugodnog dodira te da se hormon rasta slabije luči pri uskrate dodira ili kad je dodir neugodan. Dehidroepiandrosteron (DHEAS) ima važnu ulogu u modulaciji vulnerabilnosti organizma na negativne životne stresore. U osoba s artikarijom nađena je niska razina DHEAS-a u serumu, ali i viša razina anksioznosti i depresije.<sup>23</sup>

social bonding.<sup>23,24</sup> Oxytocin is also found in the cells of a number of peripheral organs such as the uterus, corpus luteum, amnion, placenta, enterocytes, interstitial cells of the testes, adrenal gland, heart, taste buds; osteoclasts/osteoblasts. In terms of the skin, it should be noted that oxytocin is found in fibroblasts and keratinocytes, which play a role in inflammatory skin diseases such as atopic dermatitis.<sup>23,25</sup> Oxytocin interacts with a series of neurotransmitters and neuropeptides, such as vasopressin, leptin, cholecystokinin (CCK), corticotropin releasing factor (CRF), serotonin, dopamine, prolactin, orexin, glucocorticoids. Increased secretion of oxytocin has been observed in close couples, in women during childbirth and breastfeeding, in the mother-child dyad, in contact with pets. The concentration of oxytocin has an effect on the care for the offspring, the parenting style, the mode of attachment and generally the feeling of closeness and security.<sup>23,26</sup>

In addition to oxytocin, cortisol plays an important role in close social interactions that include physical contact and the sensation of pleasant touch. It has been observed that the secretion of cortisol decreases in case of pleasant touch, and that the growth hormone is secreted less when touch is denied or when touch is unpleasant. Dehydroepiandrosterone (DHEAS) plays an important role in modulating the body's vulnerability to negative life stressors. A low level of DHEAS was found in the serum in people with

Istraživanja u području neuroznanosti pokazala su interferenciju puteva za dopamin i oksitocin u središnjemu živčanom sustavu. Oksitocin utječe na regulaciju mezolimbicnih dopaminskih puteva u socijalnim interakcijama koje uključuju nagradu. Disregulacija u ovom sustavu zapaža se i u ovisnika o psihoaktivnim tvarima kao i u vrijeme njihove uskrate.<sup>23,27</sup>

Endogeni opiodi imaju važnu ulogu u afilijativnom ponašanju. Istraživanje koje su proveli Martel i sur. (1995) pokazalo je da blokada opiodnih receptora u majmuna rezultira pojačanom potrebom za „njegovanjem”.<sup>28</sup>

Interferencijom oksitocina sa serotonergičkim sustavom postiže se osjećaj zadovoljstva i užitak. Usto, međuregulacija spomenutih dvaju sustava važna je za kontrolu anksioznosti te odgovor organizma na stres.<sup>29</sup>

Također valja dodati da faktor neurogenog rasta (BDNF) utječe na gustoću C-vlakana odgovornih za provođenje ugodnog dodira.<sup>8,23</sup>

## SUFICIJENTAN DODIR, DEPRIVACIJA DODIRA I NEUGODAN DODIR

Dodir je najranije iskustvo koje se razvija u ljudske jedinke. Tijekom intrauterinog razvoja maternica je trajan

urticaria, in addition to a higher level of anxiety and depression.<sup>23</sup>

Studies in the field of neuroscience have determined that there is an interference of pathways for dopamine and oxytocin in the central nervous system. Oxytocin affects the regulation of mesolimbic dopamine pathways in social interactions involving reward. Dysregulation in this system was also observed in people addicted to psychoactive substances, as well as during drug withdrawal.<sup>23,27</sup>

Endogenous opioids play an important role in affiliative behavior. The results of a study conducted by Martel et al. (1995) showed that a blockade of opioid receptors in monkeys results in an increased need for “grooming”.<sup>28</sup>

An interference of oxytocin with the serotonergic system results in feelings of satisfaction and pleasure. Furthermore, the interregulation of these two systems is important for controlling anxiety and the body's response to stress.<sup>29</sup>

It should also be mentioned that the neurogenic growth factor (BDNF) affects the density of C fibers responsible for conducting pleasant touch.<sup>8,23</sup>

## SUFFICIENT TOUCH, TOUCH DEPRIVATION AND UNPLEASANT TOUCH

Touch is the earliest experience that develops in a human being. During in-



izvor dodira uz konstantan osjećaj zagrljaja. Osjet dodira razvija se već u 8. tjednu intrauterinog razvoja.<sup>30,31,32</sup>

Nakon rođenja dijete ima potrebu zadržati osjećaj da je u zagrljaju poput onoga u maternici, zbog čega je važno osigurati blizak kontakt. Odmah nakon porođaja majka prima dijete u krilo izravnim kontaktom „koža na kožu“, pri čemu je važan i miris. Dodir je baza za povezivanje majke i djeteta i za zdrav emocionalni i tjelesni razvoj.<sup>33</sup> Također je važna i responzivnost roditelja koja treba osigurati ugodan dodir. Dijete ovisi o tjelesnom kontaktu pa je važno držanje u krilu, zagrljaj, maženje, masaža, vježbanje, njega tijela, sisanje, spavanje s roditeljima ili braćom. Osjet dodira u najranijem razvoju utječe na neurobiološki razvoj raznih sustava u sisavaca, utječe na način povezivanja s drugim ljudima, osjećaj sigurnosti i povjerenja u sebe, osjećaj integriteta ličnosti, seksualno ponašanje, kontrolu agresije, empatiju, osjećaj za moralne obveze, utječe na tjelesno zdravlje (tjelesni rast, sklonost infekcijama, ciklus spavanja), duševno zdravlje i drugo.<sup>30,32,34,35</sup>

Sapolsky (1994) nedostatak dodira smatra najtežim razvojnim stresorom.<sup>34</sup>

Postoji više istraživanja, kao i kliničkih zapažanja o posljedicama uskrate dodira. Rano iskustvo može biti neugod-

trauterine development, the uterus is a constant source of touch with a constant feeling of being embraced. The sense of touch develops as early as in the 8th week of intrauterine development.<sup>30,31,32</sup>

After birth, the child needs to retain the feeling of being hugged, like being in the womb, which is why it is important to ensure close contact. Immediately after birth, the mother receives the child into her arms for direct “skin-to-skin” contact, wherein smell is also an important factor. Touch is the basis for connecting a mother and her child, as well as for healthy emotional and physical development.<sup>33</sup> Furthermore, the responsiveness of parents who should ensure pleasant touch is also important. The child depends on physical contact, therefore holding it in the lap, hugging, caressing, massaging, exercising, ensuring body care, sucking, sleeping with parents or siblings are important. The sense of touch during the earliest development affects the neurobiological development of various systems in mammals, affects the way of connecting with other people, the feeling of security and self-confidence, the sense of integrity of the personality, sexual behavior, control of aggression, empathy, sense of moral obligation, and physical health (physical growth, susceptibility to infections, sleep cycle), mental health and other aspects.<sup>30,32,34,35</sup>

Sapolsky (1994) considered a lack of touch to be the most difficult developmental stressor.<sup>34</sup>

no ako je njegovatelj bio neresponzivan ili nedostupan pa je bliski kontakt i dodir izostao kao na primjer u napuštene djece u institucijama.<sup>36</sup> Niz je istraživanja siročadi iz Rumunjske<sup>37</sup>, zatim zapažanja u dugotrajno hospitalizirane djece<sup>10</sup>, djece depresivnih majki<sup>11</sup>, kao i obitelji u kojima nije potican tjelesni kontakt.<sup>8,32,34</sup>

Spomenuta su istraživanja rezultirala dokazima da djeca kojima je u vrlo ranom razvoju uskraćen dodir imaju dugoročne posljedice: psihofizički se sporije razvijaju, imaju manje izgleda za oporavak od bolesti i preživljenje, slabije kognitivno napreduju, pokazuju agresivno ponašanje te se bore s osjećajem srama. Također, u nedonoščadi u inkubatorima zapaženo je da nedonoščad kod koje je, osim standardne njege u inkubatoru, bio uključen i dodir imala bolje performanse poslije u životu na planu psihološke organizacije i kontrole ponašanja.<sup>38</sup>

Ako je dijete iskusilo neugodan dodir kao primjerice fizičko kažnjavanje ili je fizički ili seksualno zlostavljano, zapaženo je da takve osobe u odrasloj dobi mogu izbjegavati bliske odnose. Bliske relacije mogu biti narušene tako da postoji strah od bliskosti, da izostaje sposobnost razvoja povjerenja u druge, postoje problemi u sposobnosti povezivanja s drugima, problemi u seksualnim relacijama, poremećaji prehrane

There are numerous studies, as well as clinical observations, on the consequences of withholding touch. The early experience can be unpleasant if the caregiver was unresponsive or unavailable, so close contact and touch were missing, as for example with abandoned children in institutions.<sup>36</sup> There is a series of studies on orphans from Romania<sup>37</sup>, as well as observations on long-term hospitalized children<sup>10</sup>, children of depressed mothers<sup>11</sup>, and families in which physical contact is not encouraged<sup>8,32,34</sup>

The results of these studies showed evidence that children who are deprived of touch in very early development experience long-term consequences: their psychophysical development is slower, they have less chance of recovery from illness and survival, their cognitive progress is weaker, they show aggressive behavior and struggle with feelings of shame. Moreover, it was observed in premature infants in incubators, that premature infants who, in addition to standard care in the incubator, also experienced touch had better performance later in life in terms of psychological organization and behavioral control.<sup>38</sup>

If a child has experienced unpleasant touch, such as physical punishment, or has been physically or sexually abused, it was observed that such individuals may avoid close relationships in adulthood. Close relationships can be damaged in such a way that there is a fear of closeness, that the ability to develop trust in others is absent, there are problems in



<sup>32,34</sup>, kao i teškoće u prihvaćanju moralnih normi.<sup>34</sup>

## KOŽNE BOLESTI I DODIR

Nerijetko se kožne bolesti dovode u vezu s ranim poremećajem u vezivanju i privrženosti (psorijaza, neurodermitis). Uglavnom, riječ je o genetskoj predispoziciji za razvoj kožne bolesti uz „psihodinamski dijalog preko kože“ gledano sa psihoanalitičkog stajališta.<sup>10,39</sup>

Stresori, bili oni biokemijski ili psihoemocionalni, uvijek pokreću neuroendokrinu reakciju koja ima posljedice na imunosni odgovor, specifično kod kroničnih upalnih bolesti kože kao što je psorijaza ili neurodermitis.<sup>40</sup> Poznato je da se te bolesti pogoršaju u stresogenim situacijama. Utvrđeno je da se u osoba sa psorijazom i neurodermitisom luče specifični neurotransmitori i neuropeptidi u usporedbi sa zdravim kontrolama, što potvrđuje vezu kože i emocija.<sup>30</sup>

Osim kožnih bolesti, niz psihijatrijskih bolesti dovodi se u vezu s najranijim iskustvom u odnosu majka – dijete koje se odigrava preko dodira. Niz bioloških korelata i psihodinamskih teorija govori u prilog autizmu, poremećaju hiperaktivnosti i deficita pažnje (ADHD), bolesti ovisnosti, depresiji i

the ability to connect with others, problems in sexual relations, eating disorders<sup>32,34</sup>, as well as difficulties in accepting moral norms.<sup>34</sup>

## SKIN DISEASES AND TOUCH

Skin diseases are often associated with early attachment disorders (psoriasis, neurodermatitis). Basically, it is a genetic predisposition to the development of a skin disease with a “psychodynamic dialogue through the skin” from a psychoanalytic point of view.<sup>10,39</sup>

Stressors, whether biochemical or psychoemotional, always trigger a neuroendocrine reaction that impacts the immune response, specifically in case of chronic inflammatory skin diseases such as psoriasis or neurodermatitis.<sup>40</sup> It is known that these diseases worsen in stressful situations. It was found that people with psoriasis and neurodermatitis secrete specific neurotransmitters and neuropeptides as opposed to healthy controls, which confirms the connection between skin and emotions.<sup>30</sup>

In addition to skin diseases, numerous psychiatric diseases are linked to the earliest experiences in the mother-child relationship, which develops through touch. Many biological correlates and psychodynamic theories refer to autism, attention deficit hyperactivity disorder (ADHD), addiction, depression, and eating disorders. It is also believed that diseases such as inflammatory bowel disease, irri-

poremećajima hranjenja. Također se smatra da su i bolesti kao upalne bolesti crijeva, iritabilni kolon i pretilost, također temeljene na poremećaju u komunikaciji preko dodira.<sup>30,39</sup>

## PSIHODINAMSKO RAZUMIJEVANJE DODIRA

Koža ima posebno mjesto u razvojnoj psihologiji jer se formiranje identiteta temelji i na ranom taktilnom iskustvu.<sup>4,30</sup> Dodir je, osim za interpersonalno povezivanje, važan i za stvaranje stila privrženosti (engl. *attachment*). Teoriju privrženosti postavio je britanski psiholog John Bowlby 1958. godine. Privrženost je urođeni, biološki utemeljen i univerzalan model ponašanja temeljen na afektivnoj povezanosti između majke i djeteta. To je adaptivni mehanizam za stjecanje osjećaja zaštite i preživljavanje. Privrženost se razvija neovisno o ostalih nagona jednako kao nagon za hranom, vodom ili seksualnošću. Hijerarhijski, smatra se čak i važnijom, u najmanju ruku jednako važnom. Stil privrženosti ovisi o responzivnom dodiru majke/njegovatelja. Ako je njegovatelj responzivan, razvit će se siguran stil privrženosti, a u suprotnom će se razviti neki od nesigurnih stilova privrženosti, što može imati različite psihosocijalne ishode te utjecaj na niz regulatornih sustava.<sup>41,42</sup>

table colon and obesity are also based on a disturbance in communication through the sense of touch.<sup>30,39</sup>

## PSYCHODYNAMIC UNDERSTANDING OF TOUCH

Skin has a special place in developmental psychology, since the formation of identity is also based on early tactile experience.<sup>4,30</sup> Touch, apart from interpersonal connection, is also important for creating an attachment style. The attachment theory was established by the British psychologist John Bowlby in 1958. Attachment is an innate, biologically based and universal model of behavior based on the affective connection between mother and child. It is an adaptive mechanism for gaining a sense of protection and survival. Attachment develops independently of other drives, just like the drive for food, water, or sexuality. Hierarchically, it is considered even more important, or at least equally important. Attachment style depends on the responsive touch of the mother/caregiver. If the caregiver is responsive, a secure attachment style will develop, otherwise, some of the insecure attachment styles will develop, which can have different psychosocial outcomes and an impact on a number of regulatory systems.<sup>41,42</sup>

Harry Harlow and Robert Zimmermann (1959) performed the famous "cloth and wire mother" experiment on a sample of rhesus monkeys and proved the impor-



Harry Harlow i Robert Zimmermann (1959) izveli su poznati pokus sa „žičanom i krznenom majkom“ na uzorku rezus majmuna i dokazali važnost uloge dodira. Naime, mladunčad je unatoč činjenici da je žičana majka povezana s hranom, više vremena provodila uz krznenu majku. Na taj su način utvrdili da se privrženost razvija neovisno o potrebi za hranom.<sup>43</sup> Rana iskustva osjećanja i držanja uz majčino tijelo smatra osnovom privrženosti i separacije.

Prema psihoanalitičkoj teoriji (Freud), koža je preteča ega i osnova je za razvoj ličnosti i integraciju selfa. Psihoanalitičar Didier Anzieu opisuje psihičku dimenziju kože kao „psihičku ljusku“ s imenom „koža-ja“. Senzacije koje proizlaze iz tijela, i to one iznutra kao i one s površine (kože), čine jezgru oko koje se formira ego. Anzieu smatra da dijete zbog toga treba imati ugodna iskustva vezana za kožu, jer preko tog iskustva razvija ideju o sebi.<sup>44</sup>

Izostanak pozitivnih iskustava u ranoj, taktilnoj fazi razvoja može utjecati na nepovoljnu konstelaciju unutarnjih objekata, a samim time i na strukturu ega i razvoj selfa. Posljedica je ambivalentno ponašanje u bliskim relacijama, pri čemu je prisutan konflikt između potrebe za bliskošću i želje za odvajanjem i individuacijom. Nesvjesno agiranje ovakvih pacijenata rezultira po-

tance of the role of touch. Namely, despite the fact that the wire mother was connected to food, the infant monkeys spent more time with the cloth mother. In this way, they established that attachment develops independently of the need for food.<sup>43</sup> They consider early experiences of feeling and holding onto the mother's body as the basis of attachment and separation.

According to psychoanalytical theory (Freud), the skin represents the forerunner of the ego and is the basis for personality development and integration of the self. Psychoanalyst Didier Anzieu describes the psychic dimension of the skin as a “psychic shell” with the name “skin-self”. Sensations emanating from the body, those from the inside as well as those from the surface (skin), form the core around which the ego is formed. Anzieu believes that the child should, therefore, have pleasant experiences related to the skin, because through this experience it develops an idea of the self.<sup>44</sup>

The absence of positive experiences in the early, tactile phase of development can affect the unfavorable constellation of internal objects, and thus the structure of the ego and the development of the self. The result is ambivalent behavior in close relationships, where there is a conflict between the need for closeness and the desire for separation and individuation. The unconscious actions of these patients result in the appearance of a skin disease, which represents an attempt to eliminate the painful experi-



javom kožne bolesti koja je pokušaj eliminacije bolnog iskustva psihološke odvojenosti u preverbalnoj fazi.<sup>45</sup>

Prema Ulniku, koža je granica koja stvara ravnotežu između zaštite od vanjskih podražaja i koja propušta podražaje koje možemo asimilirati u svrhu rasta i sazrijevanja. Ona je granica između vanjskog i unutrašnjeg, onoga što nam pripada i onoga što nam je strano. Preko kože možemo izraziti i doživjeti osjećaje, ona reagira na naša unutrašnja stanja. Kožom iskazujemo svoj identitet prema van. Preko nje razlikujemo različite vrste „kontakata“: društvene, prijateljske, seksualne i sl.<sup>46</sup>

Među funkcijama kože Didier Anzieu naglašavao je podršku, sadržavanje, zaštitu od podražaja, individuaciju, omogućavanje seksualnih podražaja, integraciju, libidinozno punjenje, povezivanje različitih osjeta, svjesnost vanjske realnosti i toksičnost. Toksičnost opisuje kao negativnu funkciju vezanu uz samoozljeđivanje i brisanje granica između ega i ne-ega, te uz kožne bolesti i promjene.<sup>44</sup>

Anzieu se slaže s Angelerguesom da će slika tijela biti reprezentacija granica koje funkcioniraju kao „stabilizirajuća slika i zaštitna ovojnica“.<sup>46</sup> Kožom su se bavili i brojni drugi analitičari. Roberto Fernandes naglašavao je važnost kože kao organa za ekspresiju<sup>47</sup>. Ester Bick

ence of psychological separation in the preverbal phase.<sup>45</sup>

According to Ulnik, the skin is a border that creates a balance in terms of protecting from external stimuli and letting in stimuli that we can assimilate for the purpose of growth and maturation. It is the boundary between the external and the internal, that which belongs to us and that which is foreign to us. We can also express and experience feelings through the skin, it reacts to our inner states. Through it, we express our identity to the outside world. Through the skin, we distinguish different types of “contacts”: social, friendly, sexual, etc.<sup>46</sup>

Among the functions of the skin, Didier Anzieu emphasized support, containment, protection from stimuli, individuation, enabling sexual stimuli, integration, libidinous filling, connection of different sensations, awareness of external reality and toxicity. He described toxicity as a negative function related to self-injury and blurring the boundaries between Ego and Non-Ego, as well as skin diseases and changes.<sup>44</sup>

Anzieu agrees with Angelergues that the body image will be a representation of boundaries that function as a “stabilizing image and a protective envelope”.<sup>46</sup> Many other analysts have also dealt with the skin. Roberto Fernandes emphasized the importance of the skin as an organ of expression<sup>47</sup>. Ester Bick emphasizes the importance of the skin in early object relations and states that disturbances in



naglašava važnost kože u ranim objektivnim odnosima i navodi da poremećaji u primarnoj funkciji kože mogu dovesti do nastanka „druge kože” preko koje se ovisnost o objektu zamjenjuje pseudo-neovisnošću, te se tako stvara zamjena za funkcije kože.<sup>48</sup> Rene Spitz zaključio je da majke djece s atopijskim dermatitisom manje dodiruju svoju djecu i iskazuju više hostilnosti.<sup>46</sup> Max Schur, baveći se osobama s dermatitisom, primijetio da se kod njih mogu istodobno opservirati psihičke i somatske reakcije, te je kožne promjene i reakcije tumačio i kao tjeskobu, ali i kao agresiju.<sup>45</sup> Smatrao je da se promjenama na koži može iskazivati samokažnjavanje, ali i kažnjavanje vanjskih objekata reprezentiranih na koži. Primijetio je da osobe s kožnim promjenama mogu doživljavati ugodu kada istiskuju ili grebu promjene na koži. Budući da svaka somatska bolest privlači narcistički libido, svaki odgovor na somatsku bolest izazvat će privremenu ili trajnu regresiju koja će utjecati na sve psihičke strukture.<sup>46</sup> Naglašavao je simboličko značenje kožnih promjena. Schur je predlagao da se pacijente koji se kožom koriste da bi mislili, osjećali i djelovali treba pokušati naučiti da se služe uobičajenim načinima ekspresije. Tako smatra da verbalizacija pomaže zaustaviti regresiju ega i preverbalnu ekspresiju svojstvenu dermatološkim reakcijama. Luis Chiozza, Susana Gris-

the primary function of the skin can lead to the creation of a “second skin” through which dependence on the object is replaced by pseudo-independence, thus creating a substitute for the functions of the skin.<sup>48</sup> Rene Spitz concluded that mothers of children with atopic dermatitis touch their children less and show more hostility.<sup>46</sup> Max Schur, dealing with people with dermatitis, noticed that psychological and somatic reactions can be observed in them at the same time, and he interpreted the skin changes and reactions as anxiety, but also as aggression.<sup>45</sup> He believed that self-punishment can be expressed through changes in the skin, but also the punishment of external objects represented on the skin. He noticed that people with skin lesions may experience pleasure when they squeeze or scratch the skin lesions. As any somatic illness attracts the narcissistic libido, any response to a somatic illness will cause a temporary or permanent regression that will affect all psychic structures.<sup>46</sup> He emphasized the symbolic meaning of skin changes. Schur suggested that patients who use the skin to think, feel and act should try to learn to use the usual ways of expression. Thus, he believes that verbalization helps stop Ego regression and preverbal expression inherent in dermatological reactions. Luis Chiozza, Susana Grispon and Elsa Lanfri talk about specific fantasies in psoriasis, they believe that patients manifest unconscious specific fantasies of “feeling raw (undercooked)” due to their feelings of abandonment, humiliation and shame, and that they

pon i Elsa Lanfri govore o specifičnim fantazijama kod psorijaze, smatraju da pacijenti iskazuju nesvjesne specifične fantazije da se „osjećaju sirovi (nedovoljno pečeni)” zbog svojih osjećaja napuštenosti, poniženja i srama, te da se osjećaju da imaju „ljuske” zbog želje da imaju zaštitnu ljušturu zbog nepovjerenja, povrijeđenosti ili kritika.<sup>46</sup>

Pokušat ćemo kroz klinički primjer prikazati kako „ljuske” psorijatičnim pacijentima služe kao zaštita od vlastitih agresivnih poriva kao i potrebe da se zašтите od drugih.

### **Prikaz bolasnika**

M, 47 godina, otac dvoje djece, udovac, VSS, zaposlen, javna osoba.

M dolazi na terapiju nakon višegodišnje borbe sa psorijazom, a na savjet svoje dermatologinje. Unatrag dvadesetak godina boluje od psorijaze koja zahvaća velike dijelove njegova tijela i dio lica, no ne prihvaća sistemsku terapiju, a topičku terapiju provodi sporadično i djelomično. Dermatologinja je preporučila psihoterapiju, a i M sam navodi da primjećuje vezu stresa i pogoršanja svoje bolesti.

Rođen je u cjelovitoj obitelji, ima sestru stariju 10 godina. Roditelji su se rastali kad je M imao 6 godina (prva separacija – ovaj put od oca). Otac je zasnovao

feel like they have “shells” because of the desire to have a protective shell due to mistrust, hurt or criticism.<sup>46</sup>

We will try to present through a clinical example how “shells” serve psoriatic patients as protection against their own aggressive urges, as well as their need to protect themselves from others.

### **Case report**

M, 47 years old, father of two children, widower, university degree, employed, public figure.

M arrives to therapy after years of struggle with psoriasis, upon advice from his dermatologist. Over the past twenty years, he has suffered from psoriasis which affects large parts of his body and a part of his face, but he does not accept the systemic therapy, and the topical therapy is carried out sporadically and partially. The dermatologist recommended psychotherapy, and M himself states that he notices a connection between stress and the worsening of his disease.

He was born in a complete family, he has a sister who is 10 years older. Parents separated when M was 6 years old (first separation - this time from his father). The father started a new family in another city. M was raised by his mother and older sister. He was in regular, but rare contact with his father, usually by phone. They have such a relationship even today. He is not close with his father and his other family. He describes his mother as con-



novu obitelj u drugom gradu. M-a su odgajale majka i starija sestra. S ocem je bio u redovitim, ali rijetkim kontaktima, najčešće telefonom. Takav odnos imaju i danas, s ocem i njegovom drugom obitelji nije blizak. Majku opisuje kao stalno zabrinutu i napetu, „stvrdnutu” zbog životnih problema. Puno je radila, znala je govoriti da je on jako dobar dječak i da joj je jedino veselje. Sestru opisuje kao strogu, bila je dok je bio dijete prema njemu zahtjevna i hladna, za razliku od mame, ona ga je znala i „tresnuti”, a sada se bolje slažu i razumiju. Majka im je govorila da se moraju ponašati uzorno, biti pristojni i dobri, „uvijek ljubazni”, te da će ih ljudi drukčije gledati jer „nemaju oca”. Rani razvoj bio je uredan, išao je u vrtić, ne sjeća se pretjerano vremena prije očeva odlaska iz zajedničkog doma, ne sjeća se da je bilo svađa. U školi je bio uzoran učenik i prihvaćen od prijatelja. U rodnom je gradu završio gimnaziju i upisao željeni fakultet u Zagrebu. Netom prije odlaska na studij prvi put se pojavila psorijaza (druga separacija – ovaj put od majke, sestre i prijatelja). Obiteljska je anamneza negativna, no otac je dosta rano pretpostavio o čemu je riječ i dogovorio mu pregled kod dermatologa u Zagrebu. Sjeća se prvih predavanja na fakultetu, pokušavao se skrivati po zadnjim redovima učionica, izbjegavao je komunikaciju i upoznavanje s kolegama. Skrivaio je

stantly worried and tense, “hardened” by life’s problems. She worked a lot, she used to say that he was a very good boy and that he was her only joy. He describes his sister as strict. She was demanding and cold towards him when he was a child and, unlike his mother, she would also sometimes “smack” him. They get along better now, and understand each other better. Their mother used to tell them that they had to behave in an exemplary manner, be polite and good, “always kind”, and that people would look at them differently because “they don’t have a father”. His early development was regular, he went to a kindergarten, he does not have many memories of the time before his father’s departure from the shared home, he does not remember that there were any fights. At school, he was an exemplary student and accepted by his friends. He finished high school in his hometown and enrolled in his desired university in Zagreb. Just before going to study, psoriasis appeared for the first time (second separation - this time from mother, sister and friends). The family history is negative, but the father guessed early on what it was and arranged for him to be examined by a dermatologist in Zagreb. He remembers his first lectures at the university, he tried to hide in the back rows of classrooms, he avoided communication and getting to know his colleagues. He hid the changes with his clothes as much as he could, he avoided looking in the mirror. He felt “lonely and miserable”, he thought about giving up his studies, but he did not want to disappoint his mother. After sev-

promjene odjećom koliko je mogao, izbjegavao je pogledati se u ogledalo. Osjećao se „usamljeno i jedno“, pomišljao je na odustajanje od studija, ali nije htio razočarati mamu. Tijekom nekoliko mjeseci liječenje je dovelo do rezultata, na fakultetu je počeo nizati uspjehe i samopouzdanje mu se vratilo. Sprijateljio se osobito s jednom kolegicom koja mu je nakon duljeg vremena otkrila da njena mama ima psorijazu, no njemu se tada činilo da s njim to nema nikakve veze, smatrao je da je izliječen i da se psorijaza neće vratiti. Bio je s tom kolegicom u kraćoj vezi. Opisuje sebe kao otvorenu i ekstrovertiranu osobu, izlazi i zabavlja se. Često ide kući, kad god stigne, i tada vrijeme provodi s mamom i sestrom koje i dalje žive zajedno. I majka i sestra naglašavaju mu koliko je važno da dobro uči i studira u roku jer imaju financijske teškoće. Kada je u rodnom gradu, redovito ide na misu s mamom i sestrom, u Zagrebu nikad. Svoju buduću suprugu upoznaje na trećoj godini studija, ona je dvije godine mlađa i njezini su roditelji podrijetlom iz njegova grada. Završava studij i zapošljava se u medijima, uskoro se ženi i prvo je dijete na putu (on treba postati otac – stres). Tada se po drugi put pojavljuju psorijatične promjene, u šoku je, upada u depresivno stanje, u strahu je da njegove promjene ne primijete na poslu, uzima bolovanje i odlazi majci i sestri.

eral months, the treatment led to results, he began to achieve success at the university and his self-confidence returned. He became friends with one colleague in particular who, after a long time, revealed to him that her mother had psoriasis as well, but at the time it seemed to him that it had nothing to do with him, he thought that he was cured and that the psoriasis would not return. He was in a short relationship with that colleague. He describes himself as an open and extroverted person, he would go out and have fun. He often went home, whenever he could, and then spent time with his mother and sister, who still lived together. Both his mother and sister emphasized how important it was for him to study well and pass the exams in time because they had financial difficulties. When he was in his hometown, he regularly went to mass with his mother and sister, yet never in Zagreb. He met his future wife in his third year of studies, she was two years younger than him and her parents were from his town. He finished his studies and got a job in the media, soon he got married and his first child was on the way (he was to become a father - stress). Then the psoriatic changes appeared for the second time and he was shocked, fell into a depressed state, was afraid that his changes might be noticed at work, so he took a sick leave and went to his mother and sister. His wife protested, and even his mother did not support his move, so he and his mother returned to his wife in Zagreb after about a month. The mother then retired and stayed in Zagreb to



Supruga negoduje, a ni majka ne podržava taj njegov potez, te se zajedno s majkom nakon oko mjesec dana vraća supruzi u Zagreb. Majka tada odlazi u mirovinu i ostaje u Zagrebu da bi pomogla snahi s novorođenčecom. Njegove se tegobe sporo povlače i on se ponovno uvlači u sebe, izbjegava izlaskе i ljude, ne želi da ga itko dodiruje, čak ni majka i supruga. Majka i supruga brinu se zbog novca i potiču ga na povratak na posao. Jako mu smeta bilo kakav razgovor o tome ili spominjanje njegovih kožnih promjena. Nevoljko uzima sistemsku terapiju i to dovodi do poboljšanja. Vraća se na posao, no svi primjećuju da se promijenio, da je ozbiljniji i zatvoreniji. Dolazi drugo dijete, majka nakon nekog vremena odlazi natrag u svoj grad. Nakon nekoliko godina supruzi dijagnosticiraju karcinom dojke i započinje njezino dugotrajno neuspješno liječenje. Tijekom tog razdoblja majka je ponovno došla u Zagreb, on je radio i brinuo se o obitelji, kaže da je tih nekoliko godina bio kao robot. Ne sjeća se da je plakao kad je supruga umrla, kaže da nije stigao jer se morao brinuti o svemu, o djeci i organiziranju sprovoda. Nekoliko dana nakon suprugina sprovoda hospitaliziran je zbog generalizirane psorijaze koja je obuhvaćala 80 % tijela. Sljedećih nekoliko godina gotovo stalno ima psorijatične promjene, u manjem ili većem opsegu. Ponovno se uvlači u

help her daughter-in-law with the newborn. His ailments receded slowly and he withdrew into himself again, avoided going out and avoided people, did not want anyone to touch him, not even his mother and wife. His mother and wife worried about money and encouraged him to return to work. Any talk about it or even a mention of his skin changes bothered him strongly. He reluctantly took systemic therapy and it led to improvement. He returned to work, but everyone noticed that he had changed, that he was more serious and reserved. The second child came, and his mother returned to her town after a while. After several years, the wife was diagnosed with breast cancer and her long-term unsuccessful treatment began. During that period, his mother came to Zagreb again, he worked and took care of the family, and he says that for those several years he was like a robot. He does not remember crying when his wife died, he says he did not have the time for that because he had to take care of everything, the children and organizing the funeral. A few days after his wife's funeral, he was hospitalized due to generalized psoriasis that covered 80% of his body. Over the next several years, he almost constantly had psoriatic changes, to a lesser or greater extent. He withdrew into himself again, avoided as much as possible the public appearances that are part of his job, and made sure that the changes in his face were carefully covered with special make-up. He did not even hug his children, he avoided even shaking hands with anyone. Then

sebe, izbjegava koliko god može javne istupe koji su dio njegova posla, tada jako pazi da promjene na licu pomno budu prekrivene posebnom šminkom. Ne grli ni svoju djecu, izbjegava se s bilo kim čak i rukovati. Tada kreće COVID i on to osjeća kao olakšanje. Radi od kuće, rado nosi masku za lice čak i kada to nije nužno. Postaje vedriji i otvoreniji. Psorijaza je pod kontrolom, no nikad se potpuno ne povlači. Dolazi na terapiju u trenutku kada upoznaje 10 godina mlađu i lijepu ženu koja je također javna osoba, te ulazi s njom u vezu.

Pacijent ostavlja u ordinaciji dojam uglađene i pristojne osobe, tjeskobne, krhke i nesigurne, izgleda mnogo mlađe od svoje dobi. Psorijatične promjene na vratu i dijelu lica prekrivene su puderom. To je u potpunom nesuglasju s njegovim javnim istupima na kojima samoinicijativno i hrabro zastupa radikalne stavove i ostavlja dojam čvrste i krute osobe. Na televiziji i u drugim medijima njegove kožne promjene prekrivene puderom ne izgledaju kao psorijaza, nego kao neka nesavršenost kože, kao ožiljci od mladenačkih akni.

Navodi da je došao na poticaj svoje dermatologinje jer ne uzima terapiju. Odmah na prvom pregledu govori mi kako ne želi govoriti o psorijazi, da ne podnosi da ga bilo tko za to pita. Otac, koji je odavno u mirovini, povremeno ga u

COVID started and he felt it as a relief. He worked from home, liked to wear a face mask even when it was not necessary. He became more cheerful and more open. Psoriasis was under control, but it never went away completely. He came to therapy at the moment when he met a beautiful woman 10 years younger than him, who is also a public figure, and started a relationship with her.

The patient leaves the impression of a polite and decent person in the office, anxious, fragile and insecure, he looks much younger than his age. Psoriatic changes on the neck and part of the face are covered with foundation. This is in complete disagreement with his public appearances where he self-initiatively and courageously advocates radical views and leaves the impression of a firm and rigid person. On television and other media, his foundation-covered skin changes do not look like psoriasis, they look like some kind of skin imperfection, like youthful acne scars.

He states that he came at the urging of his dermatologist because he does not take therapy. Already during the first visit, he tells me that he does not want to talk about psoriasis, that he cannot bear to be asked about it. His father, who has been retired for a long time, occasionally asks him in rare meetings if he sees the dermatologist and takes therapy, and the patient resents him very much and is angry with him for that, which is why he avoids meeting him. He perceives talking about psoriasis as a sign that he is not



rijetkim susretima pita ide li dermatologu i uzima li terapiju, no pacijent mu to jako zamjera i ljuti se na njega i zbog toga izbjegava susrete s njim. Razgovor o psorijazi doživljava kao prebacivanje da nije dovoljno dobar, stalno podsjećanje na njegovu slabost.

Pacijent dolazi jednom tjedno.

10. seansa:

M: „Posvađao sam se sa kćeri prije nekoliko dana jer je pala ispit i naljutila se na mene jer sam joj uzeo mobitel (nap. kći je punoljetna, studentica) i rekla je da će me i K. ostaviti jer sam takav hladan i sebičan. Što ona zna. Da sam ja to rekao svojoj mami, letjela bi mi glava” (pacijent je sada u vezi oko 4 mjeseca).

T (pogledam zbunjeno).

M: „Sestra bi me tresnula.” Pauza. „A i mogla bi me ostaviti. Ne znam koliko se još dugo mogu izvlačiti na A. (pokojna supruga) ili na to da bi nas netko mogao snimiti skupa. Ali jednostavno ne podnosim da me bilo tko dira. I rukovanje mi je muka.”

T: „K. ne zna za psorijazu?”

M: „NE!”

T: „Mislite da nije nešto primijetila?”

M. tiše i opreznije, potišteno kaže: „Ma vjerojatno zna da je nešto, pa vidi... A ja se ne mogu ni pogledati u ogledalo...”

good enough, a constant reminder of his weakness.

The patient attended therapy once a week.

10th session:

M: “I had an argument with my daughter a few days ago because she failed an exam and got angry with me because I took her cell phone (the daughter is an adult, a student), and she said that K. will also leave me because I am so cold and selfish. What does she know. If I had told that to my mom, my head would be spinning.” (the patient has been in a relationship for about 4 months now).

T (I look at him in confusion).

M: “My sister would hit me.” Pause. “And she could leave me. I don’t know how much longer I can use A. (deceased wife) as an excuse or the fact that someone could film us together. But I just can’t stand being touched by anyone. Just shaking hands with somebody makes me sick.”

T: “K. does not know about psoriasis?”

M: “NO!”

T: “Do you think she didn’t notice anything?”

More quietly and cautiously, M. ruefully says: “Well, she probably knows something is wrong, she has eyes... And I can’t even look in the mirror...” (his eyes tear up) “Just don’t mention therapy to me ei-



(oči mu zasuze). „Samo mi nemojte sad i Vi spominjati terapiju. Jesmo gotovi, jesmo? Moram ići, čekaju me u Klubu.”

Pacijent se žurno oprašta, uzima baloner i odlazi iz ordinacije. ....

Pacijentove suzne oči podsjetile su terapeuta na priču o vitezu u oklopu koji je shvatio: „Samo će te suze iskrenih osjećaja osloboditi od tvog oklopa.”<sup>49</sup>

U knjizi Vitez u hrđavom oklopu Robert Fisher, američki scenarist i pisac, piše o srednjovjekovnom vitezu koji je imao lijep sjajan oklop na koji je bio ponosan. Činio je u njemu dobra djela i zanemarivao je svoju obitelj. Nikada ga nije skidao, čak ni dok je spavao. Njegova ga je supruga zatražila da ga skinu, no čovjek je tada shvatio da ga ne može skinuti. Tužan jer je shvatio da će ostati bez supruge i djece kreće na put tijekom kojeg uspijeva skidati dio po dio oklopa. Zadnji dio oklopa padne kada je počeo plakati, suze su učinile da oklop zahrđa, raspadne se i otpadne.

I M, ako počne plakati, ima izgleda da će osjetiti želju za drugom osobom, za K., za terapeutom. Terapija je trajala godinu i pol dana uz jednu kraću zimsku i nešto dulju ljetnu stanku. Nakon druge ljetne stanke pacijent se više nije vratio u terapiju. Još uvijek je u vezi s K., još uvijek ima vidljive kožne promjene.

Psorijaza je kronična autoimunosna upalna bolest kože. U Hrvatskoj je još

ther. We're done, aren't we? I have to go, they are waiting for me at the Club.”

The patient hastily says goodbye, takes his raincoat and leaves the office. ....

The patient's tearful eyes reminded the therapist of the story of the knight in armor who realized that: “*Only the tears of sincere feelings will free you from your armor.*”<sup>49</sup>

In the book “The Knight in Rusty Armor”, Robert Fisher, an American screenwriter and author, wrote about a medieval knight who had a nice shiny suit of armor that he was proud of. He did good deeds in it and neglected his family. He never took it off, not even when he was sleeping. His wife asked him to take it off, but the man then realized that he could not take it off. Sad because he realized that he will be left without his wife and children, he set out on a journey during which he managed to remove his armor piece by piece. The last piece of the armor fell off as he began to cry, the tears causing the armor to rust, disintegrate and fall away.

If M starts to cry, there is a possibility that he too will feel a desire for another person, for K., for a therapist. The therapy lasted a year and a half, with one shorter winter break and a slightly longer summer break. After the second summer break, the patient did not return to therapy. He is still in a relationship with K., still has visible skin changes.

Psoriasis is a chronic autoimmune inflammatory skin disease. In Croatia, it



poznata pod nazivom ljuskavica i od nje boluje 1,7 % populacije u Hrvatskoj. Jednako je zastupljena u muškaraca i žena.<sup>50</sup> Zahvaćeni su dijelovi kože crveni, stanice se dijele i migriraju iz bazalnog sloja prema površini toliko brzo da ne uspijevaju sazrijevati i formirati se, te tako stvaraju debele slojeve suhih ljuščica koje promjenama daju sivkasti pokrov. Promjene na koži obično se pojavljuju ili pogoršavaju nakon značajnih događaja, osobito pri separaciji. Tako se i u našeg pacijenta pojavljuje psorijaza nakon druge separacije kada se prepaio da bude viđen od novih nepoznatih ljudi. Bira zanimanje u kojem je on netko drugi. Jedan je unutar kože – granica s vanjskim svijetom, a drugi je izvana. Pitamo se što je s identitetom našeg pacijenta. Sada funkcionira kao robot koji ne skida svoj oklop i boji se „plakati“. Radije plače preko kože koje mu s jedne strane stvaraju „obranu“ od vanjskog svijeta i njegova straha od bliskosti, ali istodobno i oklop koji mu onemogućuje stvaranje bliskih odnosa, nego samo održavanje onih koji su mu dani (mama, sestra, kći i povremeno otac).

## ZAKLJUČAK

Osjet dodira smješten je u najveći organ (kožu) i gotovo ga je nemoguće isključiti. Razvija se još intrauterino i

is also known as *ljuskavica* (from the Croatian word *ljuska*, meaning a scale, a shell), and 1.7% of the Croatian population suffers from it. It is equally represented in men and women.<sup>50</sup> The affected parts of the skin are red, the cells divide and migrate from the basal layer towards the surface so quickly that they fail to mature and form, thus creating thick layers of dry scales that give the skin changes a grayish cover. The skin changes usually appear or worsen after significant events, especially during separation. This is why our patient developed psoriasis after the second separation, when he was afraid of being seen by new unknown people. He chose a profession in which he is someone else. One person inside the skin – the boundary with the outside world – and another on the outside. We wonder what is happening to our patient's identity. Now he functions like a robot that does not take off his armor and is afraid to "cry". He prefers to cry through his skin, which on the one hand creates a "defense" for him from the outside world and his fear of closeness, but at the same time, it creates an armor that prevents him from forming close relationships, and he can only maintain the relationships that were given to him (mother, sister, daughter and occasionally father).

## CONCLUSION

The sense of touch is located in the largest organ (skin) and it is almost impossible to turn it off. It develops intrauterine and is

najraniji je oblik komunikacije. Navedene činjenice govore u prilog važnosti ovog oblika komunikacije. Neurobiološki korelati i interferencija specifičnih hormona i neurotransmitora govori u prilog složenosti, ali i ugođenosti ovog instrumenta za komunikaciju. Iskustvo fizičkog dodira u razvoju ljudske jedinice jednako je važno kao zrak ili hrana. Stoga ovaj osjet treba imati na umu kada su u pitanju prevencija, dijagnoza i liječenje niza fizičkih i mentalnih bolesti ili poremećaja.

the earliest form of communication. These facts speak in favor of the importance of this form of communication. Neurobiological correlates and interference of specific hormones and neurotransmitters are evidence of the complexity, but also the adaptability of this instrument of communication. The experience of physical touch is as important in the development of a human being as air or food. Therefore, this sense should be kept in mind when it comes to the prevention, diagnosis and treatment of a series of physical and mental illnesses or disorders.

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