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Painless Multidermatomal Herpes Zoster in an Immunocompetent Elderly Male: a Case Report

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Abstract

The varicella-zoster virus is the cause of both varicella and herpes zoster. The primary infection of varicella includes viremia and a widespread eruption, after which the virus persists in nerve ganglion cells, usually sensory. Herpes zoster is the result of reactivation of this residual latent virus. The first manifestation of zoster is usually pain, which may be severe and accompanied by fever, headache, malaise and tenderness localized to one or more nerve roots. The lymph nodes draining the affected area are enlarged and tender. Occasionally, the pain is not followed by eruption (zoster sine herpete).

We hereby report an 85-year-old otherwise healthy male patient with a 3-day history of a non-painful rash on the left side of abdomen, pubic and penile regions, left groin and the left leg. He denied any pain and/or abnormal sensations before the rash onset. On examination, there were closely grouped multiple vesicles over the anterior left abdominal wall, left groin, thigh, knee and left upper quarter of penis, involving the left T12, L1-L4 and S2 dermatomes. The patient reported no pain, fever, rigor or any other symptoms; he had no associated cervical, axillary or inguinal lymphadenopathy. He denied any abdominal pain, nausea, vomiting, any weakness or sensory changes in the limbs. There was no history of penile numbness, urinary retention, and increased frequency of micturition or constipation. The varicella-zoster virus serology test performed by Calbiotech VZV IgG ELISA Kit (Calbiotech, Spring Valley, Canada) was strongly positive. The human immunodeficiency virus serology test, as well as herpes simplex virus type 1 and type 2 serology tests performed by ELISA were all negative. The Tzanck smear, stained with Giemsa, demonstrated multinucleated giant cells. The patient responded well to valacyclovir with complete clearance of lesions within one week.

An extensive PubMed search revealed only few reports of painless herpes zoster.

We present a rather peculiar case of painless herpes zoster in an elderly patient with no apparent systemic immunosuppression, with severe involvement affecting multiple adjacent and one remote dermatome. We hereby propose the term ”herpes zoster sine algesia” in cases where eruption is not followed by pain.

Key words

Herpes Zoster; Immunocompetence; Aged, 80 and Over; Signs and Symptoms; Acyclovir; Treatment Outcome; Case Reports

Herpes zoster (HZ), also known as shingles, is a self-limited disease caused by reactivation of the varicella zoster virus (VZV). The virus can cause both varicella and herpes zoster. The primary infection of varicella includes viremia and a widespread eruption, after which the virus persists in sensory ganglia of the dorsal roots and cranial nerves. Herpes zoster is the result of reactivation of this residual latent virus. The term “zoster” refers to girdle-like skin eruption with segmental distribution which classically occurs unilaterally (1). The first manifestation of zoster is usually pain, which may be severe and accompanied by fever, headache, malaise and tenderness localized to one or more nerve roots. The lymph nodes draining the affected area are enlarged and tender. The dermatomes most frequently affected are the thoracic and cranial.

Less commonly, two or three adjacent dermatomes are affected. In individuals with immunodeficiency, but less commonly in immunocompetent persons, the lesions may involve multiple contiguous, noncontiguous, bilateral, or unusual dermatomes (2, 3, 4). The onset of disease is usually heralded by pain within the dermatome which precedes the lesions by 48 to 72 hours. Occasionally, the pain is not followed by eruption ("*zoster sine herpete*") (1).

Case report

We hereby report an 85-year-old otherwise healthy male patient with a 3-day history of a non-painful rash on the left side of his abdomen, the pubic and penile regions, the left groin and the left leg. He denied any pain and/or abnormal sensations before the rash onset. On examination, there were closely grouped multiple vesicles over the anterior left abdominal wall, left groin, thigh, knee and left upper quarter of penis, involving the left T12, L1, L2, L3 and L4 and S2 dermatomes (Figures 1 - 3). The patient reported no pain, fever, rigor or any other symptoms. He had no associated cervical, axillary or inguinal lymphadenopathy. He denied any abdominal pain, nausea, or vomiting. He also denied any weakness or sensory changes in the limbs. There was no history of penile numbness, urinary retention, increased frequency of micturition or constipation. The patient suffered from hypertension and received losartan; he had a surgical history significant for herniorraphy done for bilateral inguinal hernia in 2013, and cholecytectomy for gall bladder stones in 2014. The blood test revealed no abnormalities in the total and differential leukocyte counts, and the rest of the hemogram was unremarkable. The fasting blood glucose was 96 mg/dl, and post prandial level was 127 mg/dl. HbA1c was 6.4%. The varicella-zoster virus serology test performed by Calbiotech VZV IgG ELISA Kit (Calbiotech**,** Spring Valley, Canada) was strongly positive (8.35 IU/μl, negative < 0.9). The human immunodeficiency virus serology test, as well as herpes simplex virus type 1 and type 2 serology tests performed by ELISA were all negative. The Tzanck smear, stained with Giemsa, demonstrated multinucleated giant cells (Figure 4). The patient responded well to valacyclovir with complete clearance of lesions within one week. During this time he did not experience any pain.

Figure 1. Closely grouped multiple vesicles over the anterior left abdominal wall, left groin, thigh, knee and left upper quarter of penis, involving the left T12, L1, L2, L3, L4, and S2 dermatomes

Discussion

Varicella-zoster virus (VZV) causes varicella or chicken pox as its primary presentation, usually in childhood. Only people who have previously had chicken pox are at risk of shingles. The risk and complications increase with age, due to a decrease in cell-mediated immunity to VZV (5). After primary presentation, the virus remains latent in sensory ganglia of the dorsal roots and cranial nerves. The virus is kept in this state of quiescence by a competent cell-mediated immune system. Any condition that compromises the immune system may cause reactivation of the virus which travel down axons, and manifest as cutaneous infection known as herpes zoster. Variations in the zoster syndrome depend on the dorsal root involved, intensity of its involvement, and extension of the inflammation into the motor root and

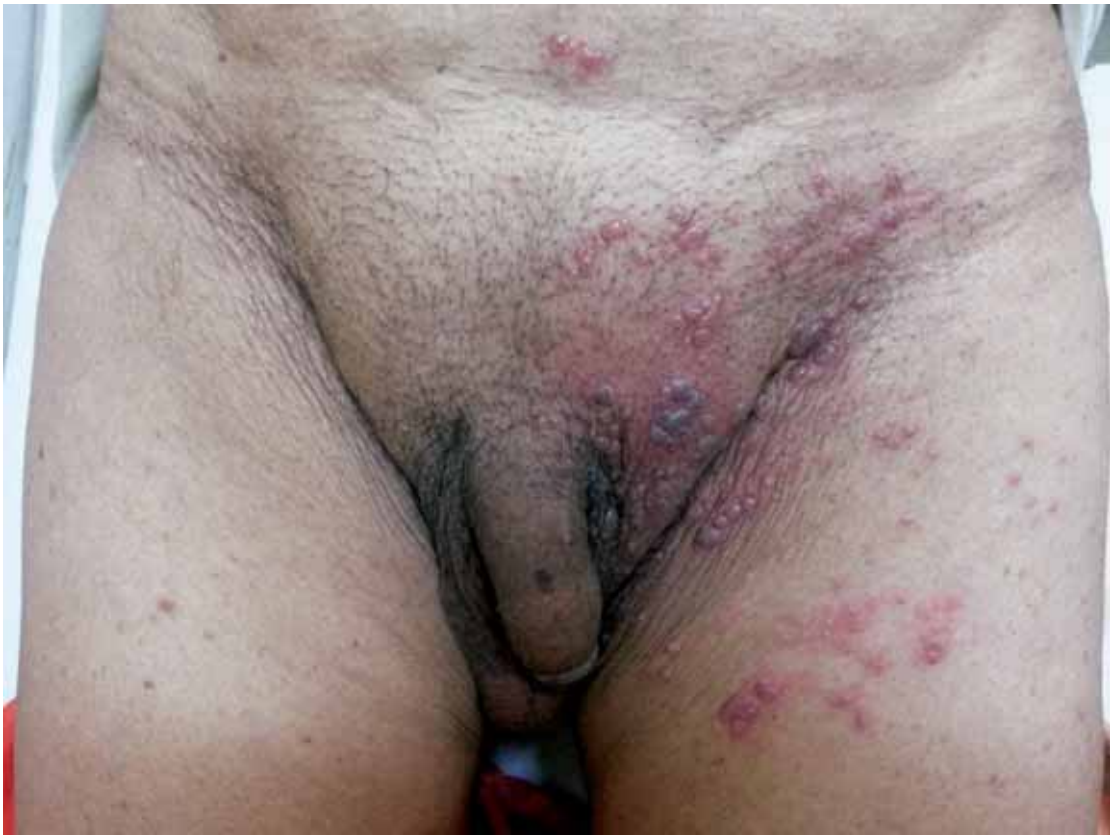

Figure 2. Closely grouped multiple vesicles over the anterior left abdominal wall, left groin, thigh, knee and left upper quarter of penis, involving the left T12, L1, L2, L3, L4, and S2 dermatomes

anterior horn cells (1). By an unknown mechanism, the virus reactivates in dorsal-root ganglia when immunocompetence declines due to: aging, long-term use of steroids, chemotherapy, infections e.g. with human immunodeficiency virus (HIV), lymphoma, cancer, or organ-transplantation. Age-related decline of the immune system is the main risk factor for cutaneous reactivation of VZV in the form of (HZ) (6). Upon reactivation, the virus replicates causing ganglionitis resulting in severe neuritis. The virus then migrates peripherally down the nerve to the skin producing radiculoneuritis, or migrates centripetally to the spinal cord and particularly in the immunocompromised, the brain, resulting in myelitis and meningoencephalitis. In rare cases, the virus may enter the circulation producing vasculitis that in turn causes stroke (7). The patient presented here did not have any underlying factors which would lead to immunosuppression. However, at his age, he most likely had a reduction in VZV-specific, cell-mediated immunity. Serological evidence for VZV infection exceeds 90% in growing adults meaning there is about 10% to 20% risk of developing herpes zoster in one's lifetime. With the increasing age, the incidence of herpes zoster rises and after the age of 75, it may exceed 10 cases per 1000 persons (8).

HZ characteristically presents with a prodrome of burning pain followed by an outbreak of vesicles distributed unilaterally within a single dermatome. In most cases, when lesions appear, the course of zoster remains unchanged. In some 16% of patients with zoster, vesicles develop beyond the dermatome primarily involved, within a few days of the local eruption. This is more common in the elderly, but in most cases only a few lesions appear and the course of the zoster stays unchanged. Rarely, in such cases, zoster may successively involve further dermatomes (1). More extensive skin involvement of several adjacent dermatomes is called multidermatomal zoster (3), whereas spread to a non-adjacent dermatome (in two non-contiguous dermatomes) is known as zoster

duplex, unilateral or bilateral (2, 4). In patients with lymphomas, or those otherwise immunocompromised, generalized varicella ("disseminated zoster") develops and may be hemorrhagic. Only few such cases, seen either in immunosuppressed or immunocompetent hosts, especially in elderly patients as in our case, were reported in the literature (2, 3, 4, 6).

HZ rash is usually confined to the area which was most heavily affected by varicella. Furthermore, but not surprising, the greater the extent of the rash or number of lesions, the more severe the pain would be. Severe involvement is categorized as more than 50 lesions over the dermatome involved (9). Our patient met the criteria for severe involvement, but did not experience any pain. Similarly to our patient, a 78-year-old male patient was reported by Akira Nishizawa in 2003, who also met the criteria for severe involvement but had no pain (6). Regarding patients with HZ and no accompanying pain, there are few reports in the literature. An extensive PubMed search revealed a case report in 1995 of painless HZ in two immunocompetent young Caucasian males who had HZ with no pain in their twenties. One of the patients claimed that he had relatives who also had herpes zoster without pain (10). Recently, in 2013, a case of almost painless HZ presenting with symptoms of cystitis, penile numbness and acute vestibular failure was reported (11). In one large series of 1.778 patients with varying degrees of skin involvement, 45% had severe rash of which 11% (or 5% of the total) complained of no pain. Moreover, when patients with severe rash and no pain were compared with patients with severe rash and varying degrees of pain (from mild to severe), the significant difference was that patients with severe rash and no pain, like our patient, were much less likely to have had a prodrome (defined as pain and/or abnormal sensations e.g. dysesthesia before the rash onset) (9). The weakness of these studies lies in the fact that acute pain severity was rated on a single occasion within a window period of 72 h after the rash onset (9, 12). For a considerable proportion of patients, however, acute pain may not have reached its maximum at this point;

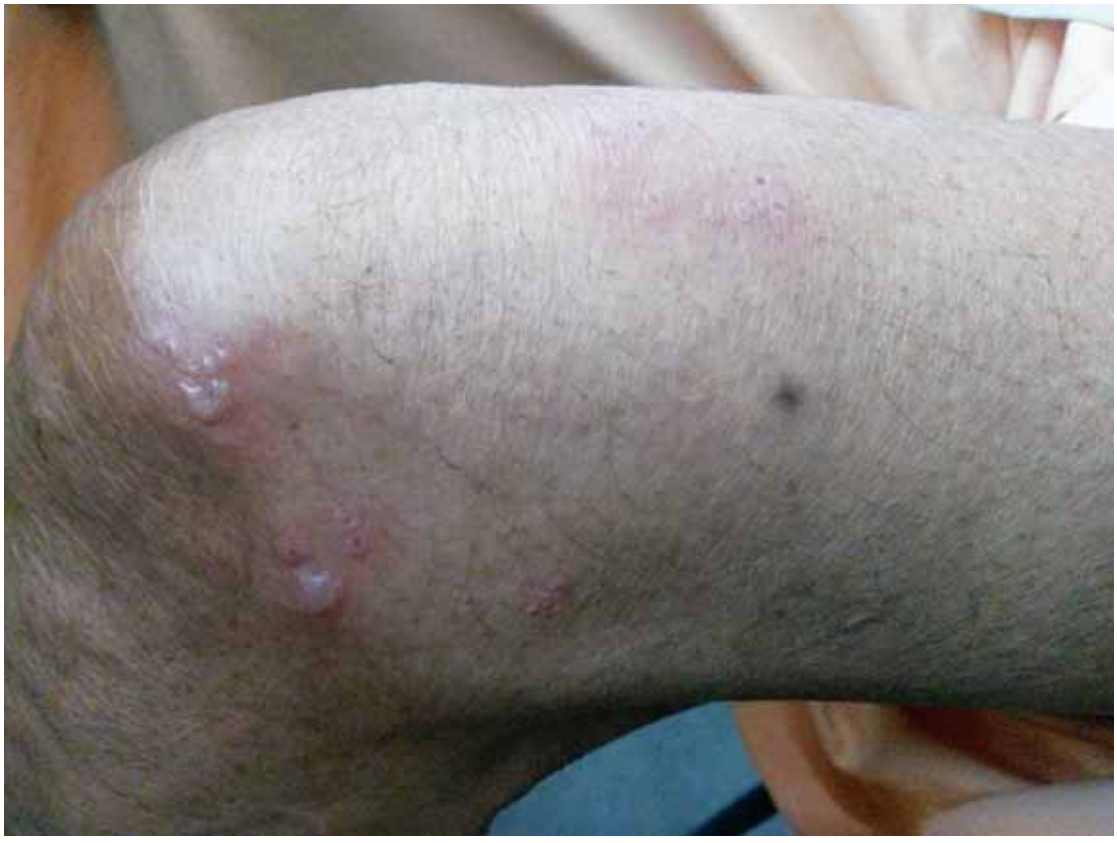

Figure 3. Closely grouped multiple vesicles over the anterior left knee, involving the left L4 dermatome

it was found to occur equally often before, at, and after the rash onset. Moreover, the relationship between rash duration and pain severity was significant, which reflected a greater likelihood of reports of no pain in patients with shorter rash duration (12). These results suggest that assessments of acute zoster pain that take into consideration its evolution over time, e.g. for a week following the rash onset, may have stronger relationships with demographic and clinical variables (12).

Regardless of whether it begins before or after the rash onset, acute pain is a prominent characteristic of HZ infection, and a large proportion of patients report that this pain is at least moderate in intensity. The lack of pain is unusual in HZ, particularly when the rash is extensive, as in our 85-year-old patient. The results of the logistic regression analyses previously conducted in the afore-mentioned large series of 1.778 patients, suggest that older age, female sex, greater rash severity, and presence of a prodrome are independently associated with moderate or severe acute zoster pain (12). Considering the etiology of the lack of pain, one can speculate that this might be due to extreme ganglionic destruction and possibly severe peripheral nerve damage. Zoster can cause some destruction of nerve fibers in the middle and lower dermis, detectable by silver-impregnation techniques (1). Considered together, these data provide further support for hypothesizing that age, rash severity, and acute pain severity in HZ do not simply reflect a single underlying process of infection severity, but instead reflect different aspects of the acute episode that each contribute independently to the pathogenesis of PHN (12). Thus, pain may not be present in some elderly individuals with herpes zoster (7).

In varicella, cells of the basal and spinous skin layers with ballooning of their cytoplasm by intracellular edema, and by distinctive nuclear changes, comprising eosinophilic inclusions and marginated chromatin are present. Some nuclei develop additional nuclear membranes which divide the nucleus into small

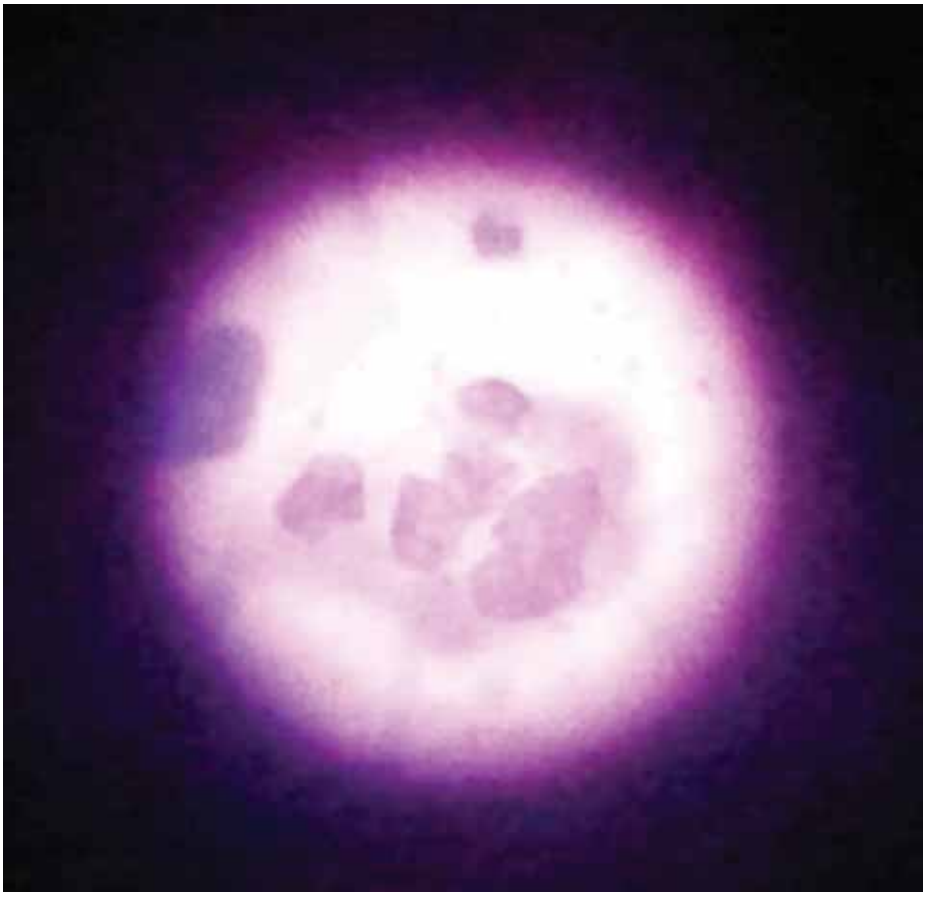

Figure 4. Cytology finding of the Tzanck smear from the buttom of a vesicle showed multinucleated giant cells

compartments. The multinucleate giant cells with up to 15 nuclei, which are a characteristic feature of infections with *Herpesvirus varicellae* and *Herpesvirus hominis*, are produced mainly by cell fusion. Intracellular edema combined with intercellular edema, forms a vesicle, the roof of which consists of the upper spinous and horny layers. A mild inflammatory reaction in the dermis later extends to the epidermis and a certain number of polymorphonuclear cells increase with ulceration (1).

The diagnosis of herpes zoster is mostly based on clinical findings. Laboratory test for suspected shingles is not routinely done (1, 8, 13). However, in atypical cases and in order to differentiate between herpes simplex and HZ, laboratory confirmation is done by: immunofluorescence microscopy of cells from the base of a vesicle for VZV; PCR testing of cells scraped from the base of a vesicle for VZV DNA, or real-time polymerase chain reaction (PCR), which can rapidly detect VZV DNA in skin lesion samples (1, 8, 13). Serological testing elicits VZV immune status, and it is useful in atypical cases and in patients without a rash but with pain, since IgG titers increase with reactivation, like in our case (1, 13). The appearance of HZ in our patient was quite clinically distinctive, thus the diagnosis of multidermatomal herpes zoster was made and supported by serology and cytology finding of elevated VZV IgG levels and multinucleated giant cells, respectively. Tzanck smear stained with Giemsa demonstrated multinucleated giant cells, known to be characteristic but not a pathognomonic feature, because they are also seen in varicella, herpes simplex and pemphigus (1). The differential diagnosis excluded herpes simplex due to zosteriform distribution, although, one would expect the latter to be associated with deep pain and regional lymphadenopathy (1), the clinical features that were not present in our patient; in addition, vesicles in herpes simplex are uniform within a cluster, the feature that was not seen in our case.

Valacyclovir was introduced, as an alternative to acyclovir, expected to have greater overall effectiveness, considering the clinical presentation, the age of the patient, as well as criteria for valaciclovir in patients with zoster (13). The patient responded well to valacyclovir with complete clearance of lesions within one week.

Conclusion

This is a rather peculiar case of painless herpes zoster in an elderly patient with no apparent systemic immunosuppression, with severe involvement affecting multiple adjacent and one remote dermatome. We hereby propose the term ”herpes zoster sine algesia” in cases where eruption is not followed by pain.

Abbreviations

HZ - herpes zoster
VZV - varicella zoster virus
ELISA - enzyme-linked immunosorbent assay
HIV - human immunodeficiency virus
PCR - polymerase chain reation

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Bezbolni herpes zoster sa zahvatanjem većeg broja dermatoma kod imunokompetentne starije osobe – prikaz slučaja

Sažetak

Uvod. Varičela zoster virus (VZV) može biti uzrok varičele ili herpes zostera (HZ). Primarna infekcija koja se manifestuje varičelom podrazumeva stanje viremije i diseminovane promene na koži i vidljivim sluznicama, posle čega virus perzistira u latentnom stanju u senzornim ganglionima spinalnih (dorzalni korenovi) ili kranijalnih nerava. Rezultat je reaktivacije latentnog virusa. Prva manifestacija HZ najčešće je bol, koji može biti jak i biti praćen groznicom, glavoboljom, slabošću i bolnom osetljivošću lokalizovanom u jednom ili više nervnih korenova. Regionalne limfne žlezde takođe mogu biti uvećane i bolne. U retkim slučajevima bol nije praćen erupcijom promena na koži i/ili sluznicama („zoster bez lezija").

Prikaz slučaja. U radu je prikazan slučaj osamdesetpetogodišnje, inače zdrave muške osobe, koja se javila na pregled dermatologu zbog promena na koži leve strane stidne regije, penisa, leve prepone leve natkolenice i levog kolena. Promene su se javile tri dana ranije i nisu bile praćene osećajem bola, kako u vremenu koje je prethodilo pojavi promena tako i za vreme njihovog izbijanja. Na pregledu, na koži levog donjeg dela prednjeg trbušnog zida, levog ingvinuma, leve gornje četvrtine penisa, kao i leve natkolenice i levog kolena, bile su prisutne multiple grupisane vezikule aglomerirane i delom konfluentne, distribuirane po T12, L1-L4, S2 dermatomima sa strogom poštedom središnje linije. Nije bilo osećaja svraba, groznice, ukočenosti, niti bilo kakvog drugog simptoma. Takođe regionalne limfne žlezde uključujući cervikalne, aksilarne i ingvinalne nisu bile uvećane. Pacijent je negirao prisustvo abdominalnog bola, muke povraćanja, osećaja slabosti i bilo koje druge senzacije u donjim ekstremitetima, bolne erekcije, gastrointestinalne ili urinarne tegobe. Serološkim testiranjem pomoću Calbiotech VZV IgG ELISA Kit (Calbiotech**,** Spring Valley, Canada), otkiven je povišen nivo IgG (8.35 IU/μl, negativan < 0.9) prema VZV. Serološko testiranje na virusom humane imunodeficijencije (HIV) i herpes simpleks virus tip 1 i tip 2 (HSV tip 1 i HSV tip 2) pomoću ELISA testa nije dalo pozitivan rezultat. Tzankovim citomorfološkim testom uzorka uzetog sa dna vezikule bojenog po Gimzi (*Giemsa*), utvrđeno je prisustvo multinuklearnih gigantskih ćelija. U terapiju je uključen valaciklovir i nakon sedam dana došlo je do potpune regresije svih promena na koži.

Detaljni *PubMed* pregled ukazao je na mali broj objavljenih slučajeva bezbolnog HZ u literaturi.

Diskusija. Varičela zoster virus (VZV) izaziva varičelu ili ovčije boginje kao primarnu prezentaciju, najčešće u detinjstvu. Samo oni koji su preležali varičelu imaju rizik od obolevanja od HZ. Rizik za nastanak HZ i njegovih komplikacija raste sa godinama, usled smanjenog celularnog imunskog odgovora na VZV. Nakon primarne infekcije, virus ostaje u latentnom stanju u senzornim ganglionima spinalnih (dorzalni korenovi) i kranijalnih nerava. Virus ostaje u fazi mirovanja pod nadzorom očuvanog ćelijskog imuniteta. Svako stanje koje dovodi do pada imuniteta može dovesti do reaktivacije virusa, koji tada putuje centrifugalno duž aksonskog vlakna do kože i manifestuje se kao HZ. Varijacije u kliničkoj prezentaciji zavise od toga koji je dorzalni koren zahvaćen, od intenziteta njegovog učešća i od prelaska inflamacije na motorne korenove i neurone prednjih rogova. Po još nepoznatom mehanizmu, virus se reaktivira u ganglijama dorzalnih korenova u trenutku kada imunitet opadne usled npr. starosti, dugotrajnog korišćenja steroida, hemoterapije, infekcija npr. virusom humane imunodeficijencije (HIV), malignih oboljenja ili posle transplatantacije organa. Relativno smanjenje funkcije ćelijskog imunskog odgovora koje se javlja sa starenjem, predstavlja glavni faktor rizika za reaktivaciju VZV u koži i nastanak HZ: nakon reaktivacije, virus se replicira u ganglionima izazivajući ganglionitis koji rezultira težim neuritisom; virus potom migrira periferno-centifugalno duž nerva do kože, izazivajući radikuloneuritis; takođe virus može da migrira centripetalno prema kičmenoj moždini, a kod imunokompromitovanih i do moždanog tkiva, izazvajući mijelitis ili meningoencefalitis. U retkim situacijama virus može ući u cirkulaciju i izazvati vaskulitis, a u ređim slučajevimai i infarkt – cerebralni inzult.

Pacijent čiji je slučaj HZ ovde prikazan, osim životnog

doba nije imao nijedan drugi faktor koji je mogao dovesti do imunosupresije. U opštoj populaciji odraslih, serološka pozitivnost na VZV premašuje 90%, što znači da rizik od nastanka HZ iznosi tokom života 10–20%. Sa starenjem godišnja incidencija HZ raste, i nakon 75. godine života može iznositi više od 10 slučajeva HZ na 1 000 odraslih osoba.

U najvećem broju slučajeva HZ karaktriše prodromalni stadijum u vidu osećaja peckanja, svraba a najčešće bola na mestu zahvaćenog dermatoma, sledi nalet unilateralnih linearno raspoređenih vezikula u okviru jednog ili dva susedna dermatoma. U većini slučajeva, kada se lezije pojave, dalji tok HZ ostaje nepromenjen, ali kod oko 16% pacijenata, vezikule se javljaju i izvan primarno zahvaćeneg dermatoma, npr. na susednom ipsilateralnom ili simetričnom kontralateralnom dermatomu. Ovo se dešava ćešće kod starijih osoba, ali u većini slučajeva pojavi se samo nekoliko (≤ 20) lezija i tok HZ ostaje dalje nepromenjen. Retko u ovakvim slučajevima, HZ može sukcesivno zahvatiti druge dermatome. Zahvaćenost većeg broja dermatoma izaziva tzv. multidermatomni HZ, dok je zahvaćenost nesusednih dermatoma opisana kao unilateralan ili bilateralan dvostruki HZ. Kod pacijenata sa limfomom ili koji su imunokompromitovani na drugi način, može se razviti generalizovana varičela („diseminovani zoster"). U literaturi je opisano nekoliko ovakvih slučajeva kod imunokompetentnih, naročito starijih osoba kao što je bio slučaj i sa našim pacijentom.

Poznato je da se promene u HZ lokalizuju na područje koje je prethodno bilo najteže pogođeno varičelom. Štaviše, ali ne i iznenađujuće jeste to da je i broj, izgled i bolnost promena na tim mestima veći. Težina kliničkog nalaza na koži karakteriše se u zavisnosti od broja lezija (papule, vezikule, pustule ili kruste) u dermatomu na sledeći način: blag – do 25 lezija, umeren 25–50 lezija, težak > 50 lezija. Naš pacijent je imao > 50 lezija u najjače zahvaćenom dermatomu, ali nije imao osećaj bola. Skoro indentično našem slučaju u literaturi je opisan 2003. godine slučaj bezbolnog HZ kod sedamdesetosmogodišnjeg muškarca koji osim životnog doba, takođe nije imao nijedan drugi znak koji bi ukazivao na stanje imunosupresije. U literaturi je objavljen mali broj ovakvih slučajeva. Godine 1995. objavljen je slučaj bezbolnog HZ sa više od 50 lezija u dermatomu kod dva imunokompetentna dvadesetogodišnja muškarca. U jednoj velikoj seriji od 1778 pacijenata sa različitim stepenom težine dermatološkog statusa, 45% je imalo najteži stepen (> 50), a 11% od njih (5% od ukupnog broja), nije imalo osećaj bola. Kada su ovi pacijenti poređeni sa onima koji su imali osećaj bola i isti stepen težine kliničkog nalaza na koži, jedina statistički značajna razlika sastojala se u pojavi prodromalnog stadijuma (definisan kao bol i/ili abnormalni osećaj npr. dizestezija, koji prethodne pojavi lezija) kod osoba kod kojih se potom javio bol. Kod našeg pacijenta nije bilo prodroma i nije bilo ni bola sve vreme trajanja HZ. Slabost ove studije leži u činjenici da je ozbiljnost akutnog bola procenjena na osnovu samo jedne evaluacije i to 72 h nakon početka pojave lezija na koži. Međutim, za značajan broj pacijenata akutni bol ne mora dostići svoj maksimum u tom momentu; utvrđeno je da se bol podjednako često javlja pre, za vreme izbijanja i nakon pojave lezija na koži. Utvrđena je značajna povezanost između dužine trajanja promena na koži i jačine bola, tako da je postojala veća verovatnoća prijavljivanja odsustva bola kod pacijenata sa kraćim trajanjem lezija na koži. Ovi rezultati ukazuju na potrebu za procenjivanjem postojanja ili odsustva akutnog bola kod HZ tokom dužeg vremenskog perioda, npr. tokom nedelju dana praćenja pacijenta od pojave prvih promena na koži, čime bi se mogla utvrditi jača povezanost bola sa demografskim ili kliničkim varijablama.

Bez obzira da li je počeo pre, za vreme, ili nakon pojave lezija na koži, akutni bol je upadljivo najčešća odlika HZ infekcije i veliki broj pacijenata ovaj bol opisuje kao bol umerenog intenziteta. Nedostatak bola je neuobičajen kod HZ, naročito kada su promene na koži obimne a pacijent stariji, kao što je to kod našeg osamdesetpetogodišnjeg pacijenta. Rezultat logističke regresione analize sprovedene u ranije pomenutoj velikoj seriji od 1 778 pacijenata, ukazali su da starije životno doba, ženski pol, veći broj lezija na koži i prisustvo prodroma predstavljaju nezavisne faktore rizika za pojavu umerenog ili jakog akutnog bola kod obolelih od HZ. S obzirom na etiologiju odsustva bola, može se spekulisati da se on možda ne javlja zbog ekstremne dekstrukcije gangliona i moguće ozbiljne neurogene lezije perifernih nerava. Ispitivanja su dokazala da HZ može izazvati destrukciju nervnih vlakana u srednjem i dubokom dermisu, koja se može detektovati pomoću impregnacionih tehnika srebrom. Ovi rezultati podržavaju hipotezu da životno

doba, težina kliničkog nalaza na koži i jačina akutnog bola kod HZ ne odražavaju jedan jedinstveni proces direktno odgovoran za stepen težine infekcije, nego različite aspekte akutne epizode koji svaki ponaosob nezavisno jedan od drugog, doprinosi patogenezi postherpetične neuralgije (bol u trajanju dužem od 3 meseca od pojave ili prestanka promena na koži). Na ovaj način se može dati objašnjenje zašto bol ne mora biti prisutan kod svih starih osoba sa HZ.

U koži, kod varičele/HZ, ćelije bazalnog i spinoznog sloja pokazuju baloniranu citoplazmu sa intraćelijskim edemom i karakteristične promene na jedru, uključujući prisustvo eozinofilnih inkluzija i marginalizaciju hromatina. Neka jedra razvijaju dodatnu membranu, koja deli jedro na veći broj manjih delova. Multijedarne gigantske ćelije sa do po15 jedara, koje su karakteristična pojava kod infekcije koju izazva *Herpesvirus varicellae* i *Herpesvirus hominis*, uglavnom nastaju ćelijskom fuzijom. Intracelularni edem kombinovan sa intercelularnim edemom formira vezikule, čiji se krov sastoji od gornjeg spinoznog i rožastog sloja. Blaga inflamatorna reakcija u dermisu kasnije se proširuje na epidermis i broj polimorfonuklearnih ćelija raste sa razvojem dubljih lezija i ulceracija.

Dijagnoza HZ se u najvećem broju slučajeva postavlja na osnovu kliničke slike. Laboratorijski testovi za dokazivanje HZV ne izvode se rutinski. Međutim, u atipičnim slučajevima i u slučajevima u kojima je potrebno napraviti diferencijalnu dijagnozu između herpes simpleks i HZ, koristi se imunofluoroscentna mikroskopija ćelija uzetih sa dna vezikule kojom se može dokazati prisustvo VZV, ili PCR tehnika brisa uzetog sa dna vezikule sa ciljem dokazivanja prisustva VZV DNA u lezijama, ili PCR u realnom vremenu, kojom se u kratkom vremenskom roku može brzo detektovati VZV DNA u kožnim lezijama. Serološki testovi mogu dokazati postojanje antitela prema VZV i mogu biti korisni kod atipičnih slučajeva i kod pacijenata sa kožnim lezijama a bez osećaja bola, kao što je to bio slučaj kod našeg pacijenta, pošto titar specifičnih IgG ponovo raste sa reaktivacijom HZV (za razliku od herpes simpleks virusa). Ispoljavanje HZ kod našeg paciijenta je bilo klinički karakteristično, a dijagnoza potkrepljena serološki i citološki pomoću ELISA testa i Tzankovog testa sa Gimza bojenjem, kojim je potvrđeno prisustvo povišenog nivoa VZV IgG u serumu, odnosno na dnu vezikula multijedarnih džinovskih ćelija, karakterističnih ali ne i patogmoničnih za HZ (mogu biti prisutne kod varičele, herpes simpleksa i pemfigusa). U diferencijalnoj dijagnozi smo isključili herpes simpleks sa zosteiformnom distribucijom, s obzirom da bi u tom slučaju promene u dubokom dermisu bile praćene bolom i regionalnom limfadenopatijom, kliničkim nalazom koji nije bio prisutan kod našeg pacijenta.

Imajući u vidu ispunjenje jednog od dva važeća kriteriterijuma za uvođenje valaciklovira u terapiju HZ, valaciklovir je uveden u terapiju kao bolja alternativa acikloviru zbog njegove veće efektivnosti, godina života našeg pacijenta i kliničke prezentacije oboljenja. Pacijent je dobro odreagovao na valaciklovir sa kompletnim povlačenjem promena na koži tokom sledećih sedam dana.

Zaključak. U radu je predstavljen nesvakidašnji slučaj bezbolnog herpesa zoster kod stare muške osobe, kod koje je bolest bez osećaja bola i bez drugih znakova sistemske imunosupresije, zahvatila veći broj susednih i jedan udaljeni dermatom. Predlažemo termin *herpes zoster sine algesia* za one slučajeve oboljenja u kojima erupciju kožnih promena ne prati osećaj bola.

Ključne reči

Herpes zoster; Imunokompetencija; Stari preko 80 godina; Znaci i simptomi; Acyclovir; Ishod terapije; Prikazi slučajeva