

SUPPLEMENTARY MATERIAL

Varicella Zoster Virus-Specific Hyperimmunoglobulin in the Adjuvant Treatment of Immunocompromised Herpes Zoster Patients: A Case Series

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Table S1: Characteristics of herpes zoster patients, therapy, treatment considerations and outcome

Case	Age (gender), predisposing factors	Affected dermatome(s) / pain	HZ therapy	Treatment considerations ^a	Outcome
1	72 years (male), CLL, therapy with venetoclax (Bcl-2 inhibitor)	V1, generalized / pain (NAS = 2)	Acyclovir i.v. 3x 5 mg/kg/d (day 0–6), VZV-IgG i.v. 1.6 ml/kg (day 2), metamizole p.o. 4x 500 mg/d (day 0–6, continuation recommended)	Risk factors: hemato-oncological disease, immunosuppressive side-effects of treatment, HZ in the head region, signs of disease aggravation (generalized HZ, necrotic lesions) → I.v. acyclovir commenced immediately (reduced dose due to impaired renal function) → VZV-IgG was commenced as early as available	→ Cessation of new vesicle formation 1 day after administration of VZV-IgG (day 3) → Hospital discharge at day 7 with complete crusting of lesions and no pain → Follow-up at day 84: complete healing of HZ without PHN
2	61 years (male), MCL stage IV B, immunochemotherapy with R-CHOP/R-DHAP	T10 / no pain on presentation	Acyclovir i.v. 3x 10 mg/kg/d (day 0–9), VZV-IgG i.v. 2.7 ml/kg/d (day 1–3), tramadol p.o. 2x 100 mg/d (day 2–6)	Risk factors: hemato-oncological disease, immunosuppressive side-effects of treatment, high risk for viral dissemination due to combined cellular and humoral immunodeficiency and high need to continue curative immunochemotherapy → I.v. acyclovir commenced immediately → Intensification of therapy with high-dose i.v. VZV-IgG	→ Cessation of new vesicle formation 1 day after high-dose VZV-IgG (day 2) → Complete crusting of lesions by day 5 → Complete healing of HZ by day 9 without PHN → Curative treatment of underlying malignancy could resume in a timely manner (see Fig. 2)
3	48 years (female), atopic dermatitis, radioiodine treatment for autonomous adenoma 6 months previously, thrombocytosis	C4, C5 / pain (NAS = 6)	Acyclovir p.o. 5x 800 mg/d (day 0–6), VZV-IgG i.v. 1 ml/kg (day 3), tramadol p.o. 2x 100 mg/d and metamizole p.o. 3x 500 mg/d (day 0, discontinued upon patient's request)	Risk factors: HZ in the neck region and mild immunodeficiency → P.o. acyclovir commenced immediately Poor treatment response after 3 days (active lesions still present, pain intensity unchanged) → Intensification of therapy with i.v. VZV-IgG	→ Relief of pain (NAS = 0) and beginning crustation of lesions by day 7 → Follow up at day 105: complete healing of HZ without PHN
4	67 years (male), rheumatoid arthritis, treatment with adalimumab and methotrexate, pre- existing cardiac and pulmonary diseases, type-2 diabetes mellitus	V3, generalized / pain (NAS = 8)	Acyclovir i.v. 3x 8.9 mg/kg/d (day 0–9), VZV-IgG i.v. 1.2 ml/kg (day 0), metamizole p.o. 4x 750 mg/d and pregabalin p.o. 1x 25 mg/d titrated up to 2x 75 mg/d (day 0–9, subsequently tapering-down of pain therapy was recommended)	Risk factors: immunosuppressive treatment, HZ in the head region, severe pain, multiple comorbidities, signs of disease aggravation (generalized HZ, necrotic lesions) → I.v. acyclovir commenced immediately → Intensification of therapy with VZV-IgG	→ Cessation of new vesicle formation and instant relief of pain 1 day after initiation of antiviral treatment → Progressive reduction of pain intensity (NAS = 3 at day 6) → Complete crusting of lesions and hospital discharge at day 10 → Follow up at day 30: complete healing of HZ without PHN (NAS = 0), coincidental diagnosis of CLL

^aAll patients received sufficient pain treatment to ease pain and to prevent the development of a neuropathic pain syndrome.

Bcl-2, B-cell lymphoma 2; *CLL*, chronic lymphocytic leukemia; *HZ*, herpes zoster; *MCL*, mantle cell lymphoma; *NAS*, numerical analog scale; *PHN*, postherpetic neuralgia; *R-CHOP*, rituximab plus cyclophosphamide, doxorubicin, vincristine, and prednisone; *R-DHAP*, rituximab plus dexamethasone, high-dose cytarabine, and cisplatin; *VZV-IgG*, varicella zoster virus-specific hyperimmunoglobulin.