CROHN S DISEASE AND ACNE FULMINANS AS ASSOCIATED DISODERS (CASE REPORT)

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Abstract

The authors are presenting a rare case of recurrent acne fulminans (AF) in man with Crohn's disease (CD). First attack of AF as associated disorder was observed at the age of 21 with positivity rheumatoid factor (28.0 U/ml), C-reactive protein (86.7 m/l), ANA (1:160), p-ANCA (1:40) and 82 erythrocyte sedimentation rate/1 hour. The second attack of AF was observed after the 4th infliximab (5mg/kg) administration, with azathioprine (100mg/day), with positivity Epstein-Barr (EBV Real Time PCR – 1835 copies/ml). The effect of AF therapy was observed after methylprednisolone (0.5-1.0mg/kg/day) with isotretinoin (0.2–1.0mg/kg/day) administration, with continual infliximab administration.

Key words: Acne fulminans, morbus Crohn, infliximab, azathioprine

INTRODUCTION

Pathogenesis of AF is unknown. Hormonal, genetic disposition, delayed hypersensitivity response to *Propionibacterium acnes*, immune complexes mediated mechanisms have been presumed (1,2).

CASE REPORT

A 30-year-old man, BMI 23.76, BSA 1.96 m², at 17 acne papulopustulosa, from 20 CD.

At the age of 21, having discontinued the methylprednisolone therapy, sudden AF, with fever (>39°C), arthralgias, myalgias, had occurred. At that time 4.0g/day of the 5-ASA mesalazine, intravenous clindamycin 1800mg/day for 14 days, oral 900mg/day for 1 month, methylprednisolone 1.0mg/kg/day, three weeks later 0.2mg/kg/day, increased to 0.75mg/kg/day of isotretinoin were administered. After the 3 months AF remission was observed, thus gradually reduction of methylprednisolone (4mg/day) and isotretinoin (0.2mg/day) was undertaken.

At age of 26, the CD-fistulizing abscessing form developed. Subsequently, the 5-ASA mesalazine (1.5mg/day) with methylprednisolone (0.5mg/kg/day), ciprofloxacin (1.5g/day), metronidazole (750mg/day) and actiferrin had been adjusted, later infliximab (5mg/kg) and azathioprine (150 mg/day) have been introduced.

The second episode of AF developed after the 4th infliximab administration (Figs.1,2). By the means of indirect immunofluorescence method were investigated ANA positivity (homogeneous core type), but c-ANCA negativity (anti-PR3; tab. 1). The microscopic haematuria, without proteinuria, and sterile urine have been detected. Normal values of the serum albumin, beta-2 microglobulin, immunocomplexes, immunoglobulins, creatinine, urea, antistreptolysin O, liver enzymes, amylase, lipid profile, glycaemia, minerals, negativity of HLA-B27, the Quantiferon-GOLD test, HIV, HBcAg, antiHBe, HBsAg,

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Cytomegalovirus, have been detected. Radiographs of sternoclavicular joints and abdominal ultrasonography were without pathological findings. The therapy of azathioprine was discontinued, by administration of the intravenous clindamycin (1.8mg/day for 14 days) with methylprednisolone (0.5-1mg/kg/day) and continuous administration of infliximab. Three weeks later, isotretinoin 0.2mg/kg/day was administered, increased to 0.75mg/kg/day. Followed 1 month oral clindamycin (900mg/day) therapy, then ciprofloxacin (1g/day) for 4 weeks. The methylprednisolone and isotretinoin were gradually reduced to zero for a period of 1 year. Therapy of infliximab has been continuing up to now, with complete CD and AF remission.

DISCUSSION

Acne fulminans is characterized by multiple confluent sterile abscesses, evolving into the hemorrhagic necrosis on the face, neck and back, histologically usually with the signs of leucocytoclastic vasculitis. The fever, malaise, myalgias, arthralgias, active arthritis, increased erythrocyte sedimentations rate, leukocytosis (leukemoid reaction), positivity of inflammatory markers, microscopic haematuria accompanied aseptic, osteomyelitis-like and osteolytic lesions sternoclavicular joints, associated with erythema nodosum have been reported (1,3,4). The EBV positivity has been discussed.

CONCLUSIONS

Combination of methylprednisolone and isotretinoin seems to be the most successful AF-therapy. The AF treatment with oral prednisolone (0.5–1.0mg/kg/day) is required (then gradually reduced to zero within the following 6-8 weeks). Oral isotretinoin should be then administered 4-6 weeks after the prednisolone therapy initiation (2). The both attacks of recurrent AF have occurred in association with CD progression. The second attack of AF was in connection with the side-effect of above mentioned treatment or, as the paradoxical response induced by infliximab (5).

Figs.1,2 The second episode of AF. Multiple cultivation sterile abscesses (sternal area) and after the treatment (methylprednisolone and isotretinoin)

Table 1. The biochemical parameters of AF

Parameters	1st AF-attack	2nd AF-attack	Remission
ESR/1hour ¹	82	34	8
CRP (<5.0 mg/l)	86.7	100.9	4.7
Le (3.9-10.0 10 ⁹ /l)	15.2	16.1	7.6
Ly (25.0-46.0 %)	19.6	10.2	26.2
Tr (140-400 10 ⁹ /l)	352	621	273
ANA	1:160	1:40	Negative
p-ANCA	1:40	1:40	Negative
RF (<14.0 U/ml)	28.0	34.1	15.6
Fe (12.5-32.2 umol/l)	8.0	2.3	5.1
Hb (140-179 g/l)	103	112	138
HTK (0,39-0,54)	0.31	0.35	0.43
Neutroph. (45.0-72.0 %)	79	82.5	62.9
EBV (PCR) copies/ml		1835	Negative

ESR=Erythrocyte sedimentation rate; CRP=C-reactive protein; Le= total white blood cells; Ly=lymphocytes %; Tr= platelet; ANA=antinuclear antibodies; p-ANCA=perinuclear antineutrophil cytoplasmic antibodies; RF=rheumatic factor; Fe=serum iron; Hb=haemoglobin; HTK=haematocrit; EBV=Epstein-Barr virus

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