Bilateral pseudothrombophlebitis

Sir: Katz et al defined the pseudothrombo-
phlebitis syndrome as the presence of signs and
symptoms of thrombophlebitis secondary to in-
jection, dressing, or trauma. We have observed 100
such cases, of which 90% were confirmed by
arthrography. Subsequently, many other causes of
pseudothrombophlebitis have been described, but Baker’s cyst remains the most common cause of the syndrome. We report a case in which a bilateral pseudo-
thrombophlebitis was secondary to ruptured
Baker’s cysts of both knees. To the best of our
knowledge this clinical situation has not been
previously reported.

A 59 year old man was admitted to hospital
because of pain, swelling, and erythema of
both calves. Over the preceding 10 years he
had had recurrent attacks of transient migratory
 monoarthritis of the larger joints, which
cleared up within a few days either sponta-
neously or with anti-inflammatory agents. Two
weeks before the current admission he
developed a synovial effusion of the left knee
joint without evidence of previous local trauma.
An arthrocentesis ruled out the presence of
crystals or micro-organisms, and he was treated
with anti-inflammatory drugs. One week later he
developed a synovial effusion of the contralateral
knee joint with pain, tumefaction, and erythema of
both calves.

On admission, blood pressure was 140/80
mmHg and temperature 37°C. There was
difficulty in walking and both Homans’ sign
and Löwenberg’s test were positive. The
remainder of the physical examination was
normal. The laboratory results showed a
sedimentation rate of 121 mm/h and an increase
of other acute phase reactants. The complete
cell count, muscle enzyme activity, rheumatoid factor, antinuclear antibody test,
erythrocyte sedimentation rate, C- and
C-reactive protein were all normal. A deep
vein thrombosis was ruled out by a phlebo-
gram and Doppler ultrasound study. An
ultrasound examination of the limbs showed
the presence of fluid in the popliteal regions of
both knees, extending along the fascial planes
as far as the ankle. A culture of synovial fluid
obtained by fine needle aspiration was nega-
tive. A bilateral nuclear magnetic resonance
scan (figure) showed liquid collection extend-
ing down from the popliteal space to the lower
third of both legs. These findings were
considered compatible with a diagnosis of
complicated popliteal cyst. An operation was
performed, initially on the left knee, owing to
the persistence of the symptoms for one
month of conservative treatment with rest and
anti-inflammatory agents. During the opera-
tion a large Baker’s cyst dissecting through the
fascial planes of the gastrocnemius and soleus
muscles of the calf was resected. Three months
later the other knee was operated on.

Both intact Baker’s cysts and those complica-
ted by rupture or dissection may manifest clini-
cally as thrombophlebitis. The differential
diagnosis may be at times impossible. Moreover,
popliteal cysts may develop in patients with
previous venous occlusion and the absence
of a previous history of joint involvement does
not exclude the possibility of this diagnosis.
A phlebogram will exclude thrombophlebitis,
but the diagnosis of Baker’s cyst is best
done by arthrography, which is currently con-
sidered the most sensitive diagnostic method
available. Computed tomographic scans and
ultrasonography are other useful diagnostic
examinations, but nuclear magnetic resonance
scans have seldom been used. A Baker’s cyst
might also coexist with a thrombophlebitis,
which is probably secondary to the cyst itself
(pseudo-pseudothrombophlebitis).

We were prompted to report our case as the
existence of bilateral Baker’s cyst is uncommon
and their simultaneous complication produc-
ing a clinical picture of bilateral pseudo-
thrombophlebitis is extremely unusual. In our
patient an arthrography was not deemed neces-
sary before the operation because of the
precise demonstration of complicated popliteal
cyst by both ultrasonography and nuclear
magnetic resonance examinations. We feel
that nuclear magnetic resonance is an equally
useful method for confirming the presence of
a Baker’s cyst in patients with clinical picture
diagnosis of pseudothrombophlebitis.

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1 Katz R, Zizic T, Arnold W P, Stevens M B. The
pseudothrombophlebitis syndrome. Medicine
(Baltimore) 1977; 56: 151-64.
2 Simpson F G, Robinson P J, Bark M, Losekay
M S. Prospective study of thrombophlebitis and
equivalent pseudophlebitis. Lancet 1980; i:
331-3.
3 Blumberg S, Kantrowitz F G. The pseudothrombo-
phlebitis syndrome: a reappraisal. Semin Arthritis
4 Prescott S, Pearl J, Tikoff G. Pseudo-thrombo-
phlebitis: ruptured popliteal cyst with deep
1192-7.
5 Sorano E, Capogna I, J L, Baker’s cyst, pseudo-
thrombophlebitis and pseudophlebitis. Where do we

Cytomegalovirus pneumonia in a patient
with rheumatoid arthritis treated with low
dose methotrexate and prednisone

Sir: In a recent issue of the Annals Wallis et al
emphasised the possibility of opportunistic
infection in patients treated with low dose
methotrexate. We report the case of a patient
with rheumatoid arthritis receiving weekly
low dose oral methotrexate in conventional
dosage and prednisolone (10 mg daily) who
presented with cytomegalovirus pneumonia.

The patient, a 51 year old man, had an eight
year history of seropositive rheumatoid arthritis. He was treated for two years with oral
methotrexate, 7.5 mg weekly. He also received
prednisolone (10 mg daily) and sulindac 1500
mg daily. He presented to hospital with
fever and cough (39-41°C) without breathlessness. There were no abnormal breath
sounds, no signs of heart failure, and no
lymphadenopathy or hepatosplenomegaly.
A chest X-ray showed a small right sided
purpuric eruption appeared on both legs. In
vestigations disclosed: erythrocyte sedi-
mentation rate 16 mm/1st hour; haemoglobin
125 g/1; leucocytes 12 x 10³/l; 38% neutrophils,
3% eosinophil, 52% lymphocytes; platelets
328 x 10³/l; serum aspartate transaminase 70
IU (normal <50); serum alanine transaminase
72 IU (normal <60); alkaline phosphatase 260
IU (normal <110); γ-globulintransferrase 357
IU (normal <50). Renal function was normal.
Abdominal ultrasound examination showed
no abnormalities. Chest radiograph showed
mild interstitial pulmonary abnormality. Arterial
oxygen and CO₂ pressures were respec-
tively 5-7 kPa and 3-8 kPa. Bacterial blood
cultures were negative. Bronchoalveolar lavage
showed 990 x 10³ cells/l with 68% lymphocytes
while 32% neutrophils and 2% monocytes.
Cytomegalovirus serology was positive (1gI >13200, IgM
>1/400). Methotrexate treatment was stopped
and antibiotics were prescribed before the
diagnosis of cytomegalovirus pneumonia was
confirmed. Cough, fever, and purpuric eruption
disappeared in three weeks. Haematological
values and hepatic tests returned to normal.

Our patient clearly did have cytomegalovirus
pneumonia. The incidence of cytomegalovirus
infection in the immunocompromised host is
well reported. Methotrexate may be more
immunosuppressive than previously suspected.
To the knowledge cytomegalovirus pneumonia
has not been described during treatment of
rheumatoid arthritis with low doses of metho-
trexate. As in the case of Wallis et al corticosteroid treatment and interaction
between methotrexate and indomethacin
might have contributed to the development
of cytomegalovirus infection. In any case, acute
pulmonary symptoms during low dose metho-
trexate treatment must not only suggest
hyperreactivity pneumonitis but also oppor-
tunitic infection.

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1 Wallis P J W, Ryatt K S, Constable T J.
Pneumocystis carinii pneumonia in patients
receiving low dose methotrexate treatment for psoriatic
2 Frank L, Frisan H M. Pneumocystis in the
treatment of cytomegalovirus pneumonia. Am
J R, Clegg D O. Pulmonary disease during the
3% treatment of rheumatoid arthritis: 7% mono-
dose pulse methotrexate. Semin Arthritis Rheum
1987; 20: 186-95.