t.d.s. produced a marked improvement in pain and corticotrophin was reduced by 5 units a day. Within two days she developed a severe headache; indomethacin was withdrawn and symptomatic deterioration ensued. Corticotrophin was increased to the original dose level and symptoms improved only slightly; a further temporary increase of 5 units a day was required before her clinical condition was adequately controlled. Subsequently she was found to have a good clinical response to indomethacin 50 mg. once or twice a day, dizziness on 50 mg. t.d.s., and headache on 100 mg. t.d.s.

Osteoarthritis

Six of seven patients with osteoarthritis noted symptomatic relief. Four out of five in whom a direct comparison was made preferred indomethacin to phenylbutazone. One patient noted no change in symptoms.

Rheumatoid Arthritis

Eleven patients with rheumatoid arthritis with measurable inflammatory features were assessed. Eight were out-patients and three were in-patients. In addition, four in-patients with swelling of the knees were included, making a total of 15 patients with active inflammatory disease (Table III). Of these 15 patients, eight showed clinical improvement with reduction in joint-swelling and two were inconclusive in that no rebound occurred on cessation of therapy. The following are examples of patients who improved clinically and noted reduction of joint-swelling.

A woman aged 58, with rheumatoid arthritis of two years' duration (Fig. 1), was severely incapacitated by pain, and the knees in particular had deteriorated to such an extent that she spent much time in bed and did not go out of doors. She was maintained on prednisone 20 mg. a day and aspirin 60 gr. (4 g.) a day. Indomethacin 300 mg. a day produced a marked clinical improvement and reduction in ring size. When she was changed blind to placebo she deteriorated to such an extent that the house-physician, who did not know of the alteration, ultimately used pethidine for analgesia. On reintroduction of indomethacin she improved once more, and after five weeks was discharged greatly improved and able to take short walks. She has been on indomethacin for a year with sustained improvement and with no side-effects. She had previously had a partial gastrectomy for duodenial ulceration and was able to tolerate indomethacin satisfactorily. Butazolidin had been ineffective in dosage of 300 mg. a day.

A 38-year-old woman developed rheumatoid arthritis at the age of 36. Neither paracetamol nor aspirin produced significant symptomatic improvement. Indomethacin 100 mg. b.d. gave her a feeling of drunkenness after 24 hours, but this disappeared on 50 mg. t.d.s. Placebo was introduced blind and assessment showed deterioration; improvement occurred on reintroduction of indomethacin.

TABLE III.—EFFECT OF INDOMETHACIN COMPARED WITH THAT OF PHENYLBUTAZONE IN ANKYLOSING SPONDYLITIS AND RHEUMATOID ARTHRITIS

Disease	Number of patients	Better than Phenylbutazone	Equivalent to Phenylbutazone	Less effective than Phenylbutazone	Inconclusive
Ankylosing spondylitis	14	9	1	1	3
Rheumatoid arthritis:					
With measurable soft-tissue swelling	15	8		3	4
With no measurable soft-tissue swelling	37	9	4	15	9

Five patients failed to show reduction in ring sizes on indomethacin. In two the explanation was probably that treatment was given for too short a time to cause much change, as it had to be stopped after a few days because of side-effects. Two patients probably did not respond because there was inadequate initial acute oedema to show measurable change. The fifth patient responded to corticosteroids but not to indomethacin.