



**Figure 11.4** Computed tomography. Images of tumors are shown before (A, B) and after (C, D) chemotherapy. The images are from a 50-year-old woman with a uterus sarcoma

complete response (CR) or as stable disease (SD), but instead it was classed as partial response.

#### d. Objective response – example of progressive disease

The following provides another clear-cut example of using the RECIST criteria, and the application of these criteria to a commonly used endpoint in oncology clinical trials, known as progressive disease (PD) (or as disease progression) (Fig. 11.5). In a description of a man with rectal cancer, Suzuki et al. (44) provide images of tumors that have metastasized to the lungs and adrenal gland. The top panels (panels A and B, Fig. 11.5) shown in the journal depict images of the **lungs**, before and after chemotherapy, respectively. An identical white arrow appears in the before and after images of the lungs, demonstrating shrinkage of a lung tumor. The lower panels (panels C and D, Fig. 11.5) show images of the **abdomen**, which includes the adrenal gland, before and after chemotherapy, respectively. In the images of the abdomen, a black arrow is shown, indicating a new tumor that materialized after chemotherapy. The objective response shown by the tumors in the adrenal gland was classified as *progressive disease* (PD).

<sup>44</sup> Suzuki C, Jacobsson H, Hatschek T, et al. Radiologic measurements of tumor response to treatment: practical approaches and limitations. *Radiographics*. 2008;28:329–344.