The diversity and severity of early and late complications in patients with gynecological tumors have lead to the development, by an international group of experts, of a glossary, assigning these complications in terms of severity in 14 organs or normal tissues (Chassagne, 1993). The aim of this glossary was to standardize complication assessment and allow comparisons between different therapeutic strategies.

One of the major advantages of this glossary is the differentiation between minor and moderate complications which can be somewhat subjective. This glossary has been shown to be very useful in evaluating treatment protocols. With the information provided by the evaluation of mostly late complications, their occurrence has been modified by adapting brachytherapy techniques (Crock, 1987).

Despite a detailed definition of these complications however, some difficulties have been demonstrated: heterogeneity in the event progression. A prospective evaluation of complications is the best approach as it allows not only to grade them at a particular point in time, but also to record their duration and their possible reoccurrence.

The AADK-system is now being used in a prospective investigation in several Scandinavian institutions. Examples of how it is applied will be demonstrated.

The dosimetric characteristics of a MLC-collimator depend to a great deal on the positioning and design of the collimator. In most applications the MLC is replacing the lower conventional collimators or even placed below the conventional collimators. In this geometry the MLC can, dosimetrically, be regarded very much as a replacement of cerrobend blocks resulting in similar dosimetric characteristics. MLCs positioned higher up in the treatment head will show a more complicated dosimetric behaviour and will not at all be suitable for electron collimation. The focusing of the MLC edges can be designed either for an arc shaped motion and nearly correct focusing in two dimensions or with a linear motion with rounded leaf ends. These MLCs, which both primarily were designed for photon beams, have been investigated with regard to dosimetry in both electron and photon beams. This presentation will primarily deal with beam characteristics of MLC-collimated electron beams and photon beam dosimetry with special attention to electrons in MLC-collimated photon beams.