The objective of this study was to assess the course over time of the Barrett's metaplasia-dysplasia-carcinoma sequence. The method used was a retrospective analysis of the medical records of a patient series with a median follow-up of 25 months. The study was undertaken in a university hospital foregut laboratory. The progress of seven patients was followed through the sequence of Barrett's esophagus, low-grade dysplasia and high-grade dysplasia to cancer. They all underwent subsequent esophagectomy and were found to have intramucosal adenocarcinoma. The main outcome measure was the time from the first diagnosis of intestinal metaplasia to the development of low-grade dysplasia, high-grade dysplasia and adenocarcinoma. Low-grade dysplasia developed in a median of 24 months, high-grade dysplasia after a median of 33 months and cancer after 36 months. All patients underwent esophagectomy with reconstruction and no patient has had a recurrence at a median follow-up of 25 months (range 10-204 months). Patients on Barrett's surveillance who develop early esophageal adenocarcinoma did so within approximately 3 years after the diagnosis of non-dysplastic Barrett's esophagus.