ASSIGNMENT 2

The dataset ear.dat is based on 214 children with acute otitis media (OME) who participated in a randomized clinical trial (Mandel et.al., 1982,Pedriatic Infectious Diseases, 1, 310-316). Each child had OME at the beginning of the study in either one (unilateral cases) or both (bilateral cases) ears. Each child was randomly assigned to receive a 14-days course of one of antibiotic, either cefaclor (CEF) or amoxicillin (AMO). The focus here is on the 203 children whose middle ear status was determined at a 14-day follow up visit. The data have the following form:

```
Column            Variable              Format or Code
------------------------------------------------------------------
 1-3              ID
 5                Clearance by 14 days   1=yes/0=no
 7                Antibiotic             1=CEF/2=AMO
 9                Age                    1=<2 yrs/2=2-5 yrs/3=6+ yrs
 11               Ear                    1=1st ear/2=2nd ear
------------------------------------------------------------------
```

Construct a model in BUGS to estimate the efficiency of the drug treatment considering also other possible risk factors.