Book review: The evolution of the human placenta

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This book has been dedicated to the Obstetricians-Gynaecologists who have collaborated with the authors over many years to improve scientific knowledge of women’s health in pregnancy with specific relation to the establishment and maintenance of the placenta.

The book has been separated into eight chapters of substantial length and includes both an introduction and conclusion. The introduction is long and doesn’t always read as an introduction but does lead you to the first chapter which begins with the history of placental investigations. This feels appropriate to the reader when considering the title of the book. The authors draw on the historical significance of the placenta throughout Ancient Greece, the Renaissance up until the modern day and include the theories of Aristotle, Darwin and more recent modern anatomists. This is of interest to midwives and includes a passage on the techniques of expelling placentas after birth in ancient Greece. However, although this aspect is from the human perspective it is only a small proportion of the chapter and the authors write substantially about other animal and types of placenta also.

Unfortunately, this can be said for the majority of this book and so this is where the appropriateness and usefulness of the book for midwifery practitioners is lacking. A large proportion of the book discusses the placentae of all animals and not just humans even though there is one chapter dedicated to ‘comparative mammalian placentation’ it feels that this theme runs throughout the book and is not dedicated to one chapter. Although there are parts of the book where this is relevant to show the evolution of the human placenta is can sometimes feel that the title of the book is misleading and can be difficult for the reader to follow.

The book discusses embryology at a high level and any practitioner reading this book would need to be up to date with their biological knowledge of the embryo in the very early stages of pregnancy. In this current climate of midwifery care, many midwives would not meet with women pre
conceptually and the book would not be appropriate for such a practitioner. However, it may be useful for a clinical working within the area of very early pregnancy such as IVF or midwife sonographers. However, such practitioners would still need to deal with the large amount of information dedicated to the placental discussions of all animals and may find that small sections of the book are of use only.

The book does discuss the placentas role as a regulatory organ and its ability to favour sex, genes and other genetic regulation - again this applies to all animals and not just humans. It also discusses evolution in general well and culminates in a strong chapter called ‘Modern Gestational Challenges’. This chapter is most beneficial to midwives and discusses amongst other items, fertility, efficiency and childrearing, morning sickness, pre term birth and early pregnancy loss. It also asks the reader to consider why humans have such high rates of early pregnancy loss in comparison to other mammals and the human experience of morning sickness. This chapter holds the interest of the reader well and I would suggest this is because it is directly related to humans and can be extrapolated to midwifery care today.

Unfortunately, this book does not feel user friendly to the reader. The combination of scientific language, the minimal use of pictures, a lack of glossary (including abbreviations) and the length of each chapter means that it can be difficult to follow. Added to this, the large amount of discussion that is dedicated to all placental animals and not just humans means that this book struggles to hold the interest of the reader for long periods.

Overall, I was disappointed with the book and do not feel that it is a book that would benefit midwives. It would benefit those who have a strong interest in all types of animal birth or those within a research field in early pregnancy.