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Blood Supply of female reproductive system of *Lepuscapansisarabicus* (Arabain hare)

SuraAbdulMunaff*, Abed HasanBaraj*
Department of Biology, university of Baghdad
Corresponding Author: SuraAbulMunaff

Summary:*The anatomy of the arterial and venous vessels of the mammalian oviduct is well describedin women and in laboratory and farm animals. The arteries are derived from the ovarian anduterine stems; the relative contribution of these vessels, however, or variations in that contributionwith the menstrual or estrus cycle and/or gamete or embryo transport is unknown.*

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I. Introduction

The tubal arteries are derived from branches of the ovarian and uterine arteries, notwithstanding extensive connections (Warwick and Williams, 1973; Watanabe, 1963), the relative contribution of these vessels or the variation in that contribution with the menstrual cycle in women or the estrus cycle in laboratory or farm animals or during mammalian ovum or embryo transport is largely unknown.

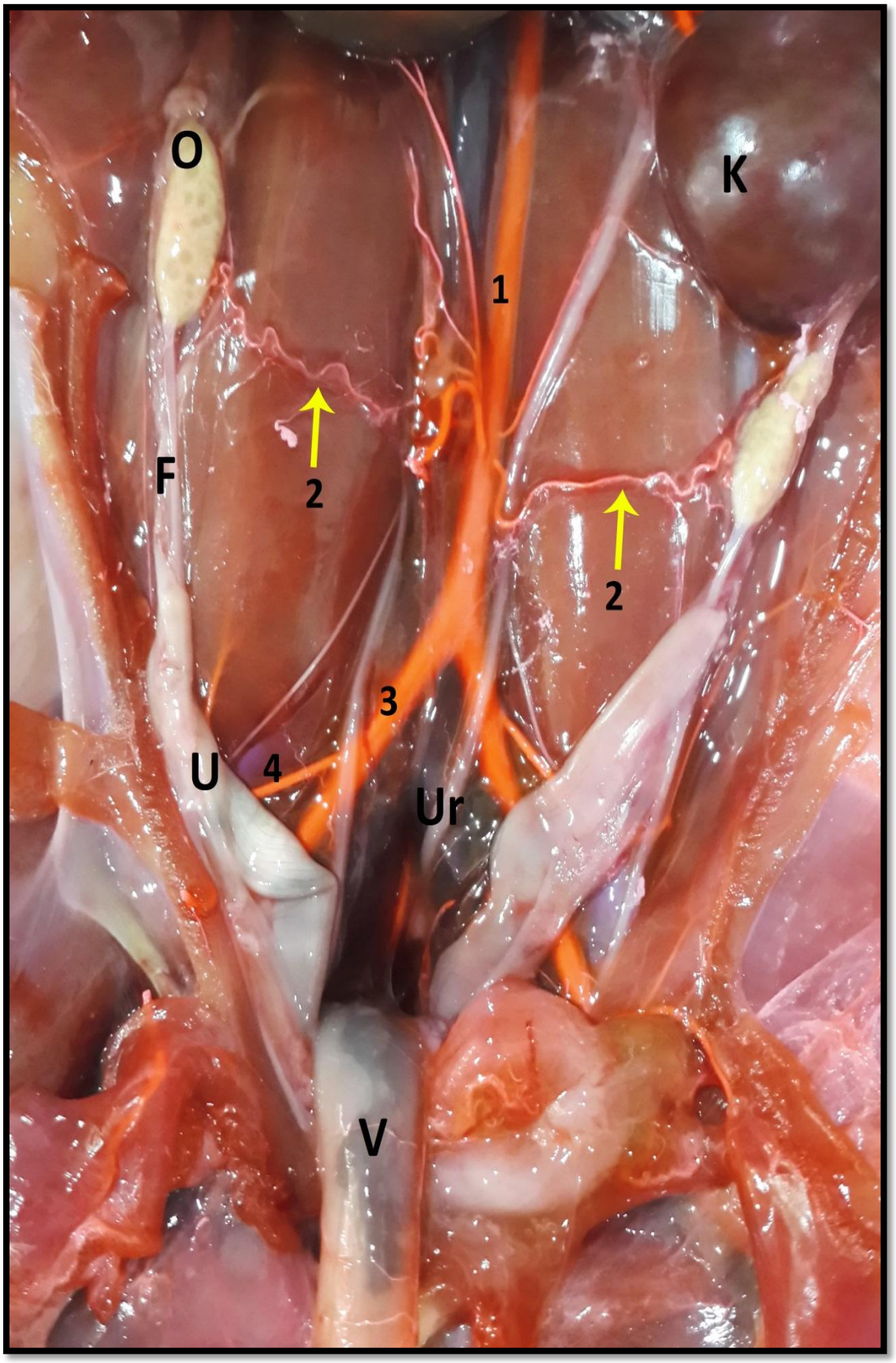
Branches of the uterine artery, in the human oviduct, in general, supply the isthmus and branches of the ovarian artery the remaining parts of the tube. Either artery alone however, may supply the whole tube (Eddy and Pauerstein, 1980). Borell and Fernstrom (1953), using an arteriographic technique, demonstrated this in vivo and described women where the tubal Arterial supply is derived entirely from either the ovarian or the uterine arteries or from an admixture of the two. This series, however, was small and the observations were not related to any specific time in the menstrual cycle.

II. Material and methods:

In order to investigate the blood supply of the oviduct, adult females of*Lepuscapansisarabicus* (Arabain hare)were collected from Najaf desert, and anesthetized by (ketamin) and they have been given a time to complete bleeding through a pinhole opened in the left ventricle until they died.The female was injected by using 50 ml syringes attached to catheters and inserted in to the heart. First, normal saline was used to wash the blood vessels, followed by a mixture consist of 2 parts ammonium hydroxide to 3 parts latex , carmine stain was added for red color . In order to prevent the vascular out flow of mixture glacial acetic acid was added and the heart pinhole was closed by the artery forceps. After the completion injection, the whole body was placed in 10% formalin for 48 hr(Ikegami,*et al*. 2016).

III. Results And Discussion:

The ovarian arteries originate from the abdominal aorta and, as they pass caudally, give rise to a long caudal branch which runs essentially parallel to the tube. The caudal branch supplies the tube and the tip of the uterine horn. The cranial branch of the ovarian artery divides into a branch which supplies the ovary and a branch which supplies the ampulla and surrounding tissues; in addition, the ovarian branch divides as it approaches the ovary and some of the branches supply the tube. The uterine arteries arise from a branch of the internal iliac arteries and pass ventral toward the cranial portion of the vagina and cervix to run parallel to the caudal portion of the uterine horn and then divide into two prominent branches. The medial branch supplies the caudal portion of the uterine horn and ends by anastomosis with the contralateral uterine artery. The lateral branch provides a number of branches which supply the cranial half of the uterine horn and the tube.The main oviductal branch of the ovarian artery merges with the cranial branch of the uterine artery (Figure 1, and Figure 2). Dickson *et al* (1974),also described anastomoses between branches of the ovarian and uterine arteries within the web of the oviduct-uterine arcade. In addition, they reported oviductal ramifications of the ovarian branch of the ovarian artery which anastomose on the ampullary surface with the cranial terminal ramifications of the oviductal branch forming a smaller oviductal vascular circle similarly described of rabbit tubal vasculature has been studied by Gothlind and Carter (1969); Del Campo and Gmther (1972); Dickson *et al.* (1974); and Verco (1991), in general, their descriptions were similar.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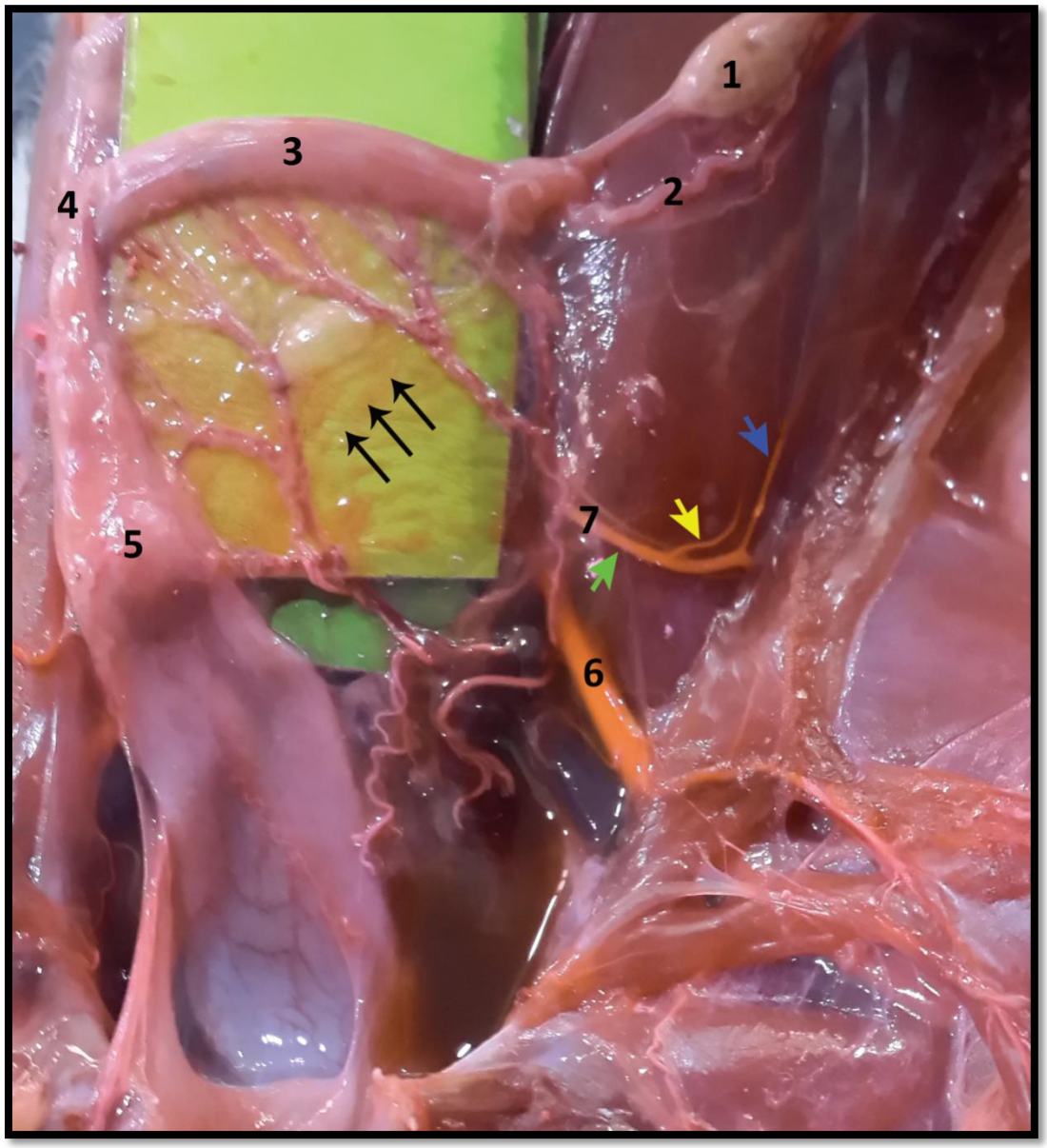

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