Conclusions: The Odón device is designed to minimize trauma to the mother and baby. It may also protect the baby from intrapartum infection and has potential for application by mid-level providers and in low resource settings. These features combined make it a potentially revolutionary development in obstetrics.

O068

IMMUNE RESPONSE TO THE HPV-16/18 AS04-ADJUVANTED VACCINE ADMINISTERED AS A 2-DOSE OR 3-DOSE SCHEDULE UP TO 3 YEARS AFTER VACCINATION

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Conclusions: The Vaccination

Figure 1. Kinetics of antibody response in 3D (15–25 years) and 2D (9–14 years) schedules (M36 ATP cohort for immunogenicity, subjects seronegative at baseline).

Table 1. M36 GMTs and GMT ratios of 3D schedule in women aged 15–25 years to 2D schedule in girls 9–14 years old (M36 ATP immunogenicity cohort, subjects seronegative at baseline)

| Schedule       | HPV-16 GMT [95%CI] | HPV-18 GMT [95%CI] | HPV-16: 3D/2D GMT Ratio [95%CI] | HPV-18: 3D/2D GMT Ratio [95%CI] |
|---------------|---------------------|---------------------|--------------------------------|--------------------------------|
| 2D (9–14 years) | [1282.6–1975.9]     | [560.3–905.6]       | [0.72–1.49]                     | [0.72–1.49]                     |
| 3D (15–25 years)| [1298.2–1960.0]     | [530.4–895.9]       | [0.73–1.37]                     | [0.73–1.37]                     |
| 3D (9–14 years) | [1298.2–1960.0]     | 500                 | [0.73–1.37]                     | N/A                            |
| 2D (9–14 years) | [1298.2–1960.0]     | 500                 | [0.73–1.37]                     | N/A                            |

Objectives: The HPV-16/18 AS04-adjuvanted vaccine (GlaxoSmithKline Biologicals) is highly immunogenic using its licensed 3-dose (3D) vaccination schedule. This study (NCT00541970) evaluated 2-dose (2D) schedules using the licensed vaccine formulation (20 μg each of HPV-16 and -18 antigens; 20/20) or an alternative formulation (40 μg of each antigen; 40/40), compared with the standard 3D schedule. We present immunogenicity and safety up to Month (M) 36, with particular focus on subjects receiving 2 doses of the licensed formulation.

Materials: Healthy females (age-stratified: 9–14, 15–19, 20–25 years) were randomised to receive 2 doses of HPV-16/18 AS04-adjuvanted vaccine 20/20 at M0,6; 40/40 at M0,6 or 40/40 at M0,2; or 3 doses of 20/20 at M0,16.

Methods: HPV-16/18 antibody seroconversions and geometric mean titres (GMT) in the according-to-protocol (ATP) cohort for immunogenicity and vaccine safety in the total vaccinated cohort were assessed up to 3 years after the first dose. Additionally, GMT ratios between the 3D and 2D schedules were calculated with 95% confidence intervals (CI).

Results: All subjects seronegative at baseline seroconverted after vaccination and remained seropositive for both antigens up to M36. GMTs were substantially higher than natural infection titres in all groups. Moreover, the kinetics of antibody response in initially seronegative girls aged 9–14 years receiving 2 doses of the licensed vaccine formulation (20/20 M0,6) and of women aged 15–25 years receiving the standard 3D schedule were comparable (Figure 1).

M36 GMTs between these groups also appeared to be similar and GMT ratios were close to 1 (Table 1). The vaccine had a clinically acceptable safety profile in all groups up to M36. Few serious adverse events were reported in each group (range 0.6%–2.8%); none were considered by the investigators to be related to vaccination.

Conclusions: 2D schedules of the HPV-16/18 AS04-adjuvanted vaccine were immunogenic and generally well-tolerated in girls aged 9–14 years and women aged 15–25 years up to 3 years after the first vaccine dose. Antibody responses to a 2D schedule of the licensed vaccine formulation in girls aged 9–14 years administered at M0,6 appeared comparable to the standard 3D schedule in women aged 15–25 years up to 3 years after first vaccination.

O069

RAPID COMMUNITY-BASED PREVENTION OF MATERNAL MORTALITY, PERINATAL MORTALITY, AND OBSTETRIC FISTULA

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Objectives: The project tests whether disease eradication tools can prevent maternal mortality and obstetric fistula in a multiethnic, nomadic/subsistence-farming population across a large, remote area using relatively modest resources.

Materials: The project was initiated across 4,650 sq. km. in Niger and expanded in May 2010 to 8,878 sq. km, covering 100,000 people from February 2008, now 263,000.

Methods: Volunteers with 2–3 days training and monthly supervision collect data on pregnancies in the village and surrounding hamlets. They encourage prenatal consultation and births in a health setting, ask permission in advance for the woman to be evacuated should prolonged labor occur, and initiate evacuation if the sun might rise a 2nd time over a birthing woman. Maternal deaths and fistula cases lead to verbal autopsy/case investigation by a physician. Monthly data on births in the health system, pre- and postnatal consultations, are taken from health center logbooks. This public health programme is not a trial, yet monthly data allow analysis of outcomes.

Results: Obstructed labor deaths, previously a main cause of maternal mortality, stopped in 4 months and remain at zero 42 months and 21,394 births later. Including expansion areas, 34,947 births have occurred since the last obstructed labor death. Birth-related maternal mortality fell 75.3% from 637 to 158/100,000 births (p = 0.0064), while babies born dead or dying within 3 days
VELAMENTOUS CORD INSERTION AND FETAL OUTCOMES: CASE REPORTS AND REVIEW OF THE LITERATURE

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Objectives: To report an unusual case of preterm delivery associated to maternal L. monocytogenes/Y. enterocolitica infection and in which the newborn presented malformations and perform a systematical review of the literature about these infections and their implications on pregnancy outcomes.

Methods: We reported a clinical case and performed a systematic search of the Cochrane library, EMBASE, Pubmed and MEDLINE databases. We reviewed disease, diagnosis, effects on pregnancy outcomes, treatment and follow-up.

Results: Maternal Listeria monocytogenes (L. monocytogenes) and Yersinia enterocolitica (Y. enterocolitica) infections, most frequently associated with gastrointestinal disorders, have been associated with adverse pregnancy outcomes. The connection between each of these maternal infections and stillbirth, pregnancy course disorders such as amnionitis, preterm labor and spontaneous abortion, and neonatal sepsis have been suggested in a wide range of studies. In our case, these infections were related with preterm delivery of a newborn with gut and renal malformations.

Conclusions: Although maternal-fetal infection by L. monocytogenes and Y. enterocolitica has been reported to be a rare pregnancy complication, it must be considered in adverse pregnancy outcomes that remain without another explanation. Furthermore, we suggest that the hypothesis of association between fetal malformations and these infections may be taken in account in future studies.

NEONATAL OUTCOME IN PRETERM VERSUS TERM DELIVERIES

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Objectives: To estimate the risk of short-term complications in neonates born between 28 0/6 and 36 6/7 weeks of gestation as compared to term deliveries.

Methods: Gestational age was sub-grouped into 28–33 6/7, 34–36 6/7 and 37–42 completed weeks of gestation. Statistical comparisons were performed using chi-square test and logistic regression. Main outcome measures- Perinatal morbidity, including 5-minute Apgar scores, hypoglycemia, hypothermia, neonatal sepsis/ respiratory distress syndrome and admission to the intensive care unit.