Data Article

Data on post-partum evaluation of women with abnormal cervical cytology in pregnancy

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ABSTRACT

During pregnancy, the only diagnosis that may alter management is invasive cancer. Thus, the primary aim of the cytological screening and subsequent colposcopy performed during pregnancy should be the exclusion of invasive cancer, “Practice Bulletin No. 140: management of abnormal cervical cancer screening test results and cervical cancer precursors,” (American College of Obstetricians and Gynecologists, 2013) [1]. However, the impact of the delivery on the regression of the cervical lesions is still debated.

This data article concerns the post-partum evaluation of colposcopic patterns, cytological and histopathology findings in women diagnosed with abnormal cervical cytology in pregnancy, included in the paper entitled “Reliability of colposcopy during pregnancy” (Ciavattini et al., 2018). Data about the rates of persistence, progression and regression of CIN after delivery are reported.

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Specifications table

| Subject area                      | Medicine and Dentistry               |
|-----------------------------------|--------------------------------------|
| More specific subject area        | Obstetrics, Gynecology and Women’s Health |
| Type of data                      | Tables                               |
| How data was acquired             | Clinical charts.                     |
| Data format                       | Raw, filtered, and analyzed.         |
| Experimental factors              | An observational retrospective cohort study was conducted by searching our clinical databases, and the medical records of women fulfilling the study inclusion criteria were retrospectively analyzed. Pertinent sociodemographic and clinical data were collected. Data regarding the referral cytology, the colposcopic examination and the histopathological findings on biopsy were also collected. |
| Experimental features             | Analysis of data retrospectively collected from January 2013 to December 2017 in four Institutions involved. |
| Data source location              | - Woman’s Health Sciences Department, Gynecologic Section, Polytechnic University of Marche, Via Corridoni 11, 6010, Ancona, Italy.  
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| Data accessibility                | Data are with this article.          |
| Related research article          | Ciavattini A, Serri M, Di Giuseppe J, Liverani CA, Fallani MG, Tsiroglou D, Papiccio M, Delli Carpini G, Pieralli A, Clemente N, Sopracordevole F. Reliability of colposcopy during pregnancy. Ciavattini A, Serri M, Di Giuseppe J, et al. Eur J Obstet Gynecol Reprod Biol. 2018 Jul 27;229:76-81. [2] |

Value of the data

- Our data can be compared with other data across the globe for a comparative analysis.
- The dataset can be used by other researchers in carrying out research in the area of pre-neoplastic lesions after delivery.
- The data could be used to support the findings of low progression rate and high regression rate of CIN after delivery.

1. Data

Data presented results from a multicenter observational study of pregnant women diagnosed with an abnormal cervical cytology, who subsequently were evaluated during pregnancy and 6–12 weeks after delivery in the Institutions involved, from January 2013 to December 2017.

The scope of the research was to collect data (n = 52 patients) to evaluate the colposcopic patterns, cytological and histopathology findings before and after delivery.

Characteristics of the study cohort are reported in Table 1. The mean age of the patients involved was 30.3 ± 4.3 years (range 22–42). After delivery, a lower number of high-grade cytological abnormalities, a lower number of ANTVG2 colposcopies, and a lower number of CIN 2–3 biopsies was found compared to pregnancy. Only the reduction of the colposcopic degree was statistically significant between ante-partum and post-partum examination (p = 0.004).
Table 1
Cytological, colposcopic and histopathological characteristics of the study cohort (n = 52) before and after delivery.

|                          | Pregnancy n = 52 | Post-partum | n = 52 | p   |
|--------------------------|------------------|-------------|--------|-----|
| Lesser cytological abnormalities in pregnancy | 16 (30.8%)       | Post-partum lesser cytological abnormalities or negative cytology | 24 (46.1%) | 0.160 |
| Major cytological abnormalities in pregnancy | 36 (69.2%)       | Post-partum major cytological abnormalities | 28 (53.9%) |     |
| ANTZG1 during pregnancy | 9 (17.3%)        | Post-partum NTZ or ANTZG1 | 19 (36.6%) | 0.045 |
| ANTZG2 during pregnancy | 43 (78.9%)       | Post-partum ANTZG2 | 33 (63.4%) |     |
| No ante-partum biopsy    | -                | No post-partum biopsy | 5/52 |     |
| CIN 1 biopsy during pregnancy | 5/52 (9.6%) | Post-partum CIN 1 or negative biopsy | 11/47 (23.5%) | 0.109 |
| CIN 2–3 biopsy during pregnancy | 47/52 (90.4%) | Post-partum CIN 2–3 biopsy | 36/47 (76.3%) |     |

Data are expressed as n (%) as appropriate.
NTZ: “normal transformation zone; ANTZG1: “grade I abnormal colposcopic findings”; ANTZG2: “grade II abnormal colposcopic
2. Experimental design, materials, and methods

All the pregnant women with abnormal cervical cytology underwent a colposcopy, as recom-
mended by the most recent international guidelines [1,3-5]; all the colposcopies were performed by
gynecologists with expertise in diagnosis and management of lower genital tract intraepithelial
lesions. All the colposcopic examinations were recorded accordingly to the 2011 revised colposcopic
terminology of the International Federation for Cervical Pathology and Colposcopy (IFCPC) [6].

Histopathological examinations were performed by the pathologists of our institutions and all the
cervical cytology samples were analyzed by the cytologists of our institutions, both with expertise in
the field of cervical intraepithelial lesions; the cytological abnormalities were classified according to
the most recent Bethesda system terminology [7].

For the present analysis, only pregnant women who underwent a colposcopy-guided biopsy were
considered. The biopsies were performed only on areas with abnormal colposcopic findings and
random biopsies were not performed.

Exclusion criteria were inadequate colposcopy and current HIV infection or immunodepression
(e.g. ongoing immunosuppressive therapies). Cases with a concomitant high grade vaginal intrae-
epithelial lesion or vaginal cancer were excluded as well.

At the first post-partum evaluation all patients underwent cervical cytology and colposcopy with
eventual cervical biopsy and conization in case of high-grade CIN (CIN 2–3).

Data about post-partum evaluation are available for fifty-two patients. This population, fulfilling
the study inclusion/exclusion criteria, constituted the study cohort.

3. Statistical analysis

Statistical analysis was performed using IBM SPSS version 22.0 (IBM Corporation- Armonk, New
York, 10504-1722, United States). χ2 testing was used to evaluate associations. A P < 0.05 was
considered statistically significant.

Acknowledgments

None. The approval of the local ethics committee was obtained (CRO IRB-2014-08).

Transparency document. Supporting information

Transparency data associated with this article can be found in the online version at https://doi.org/
10.1016/j.dib.2018.11.092.

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